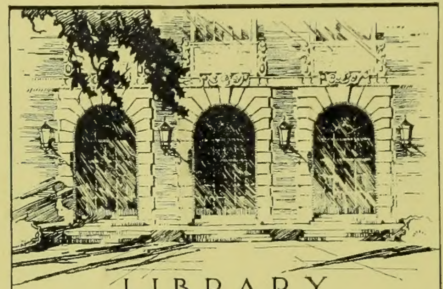

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

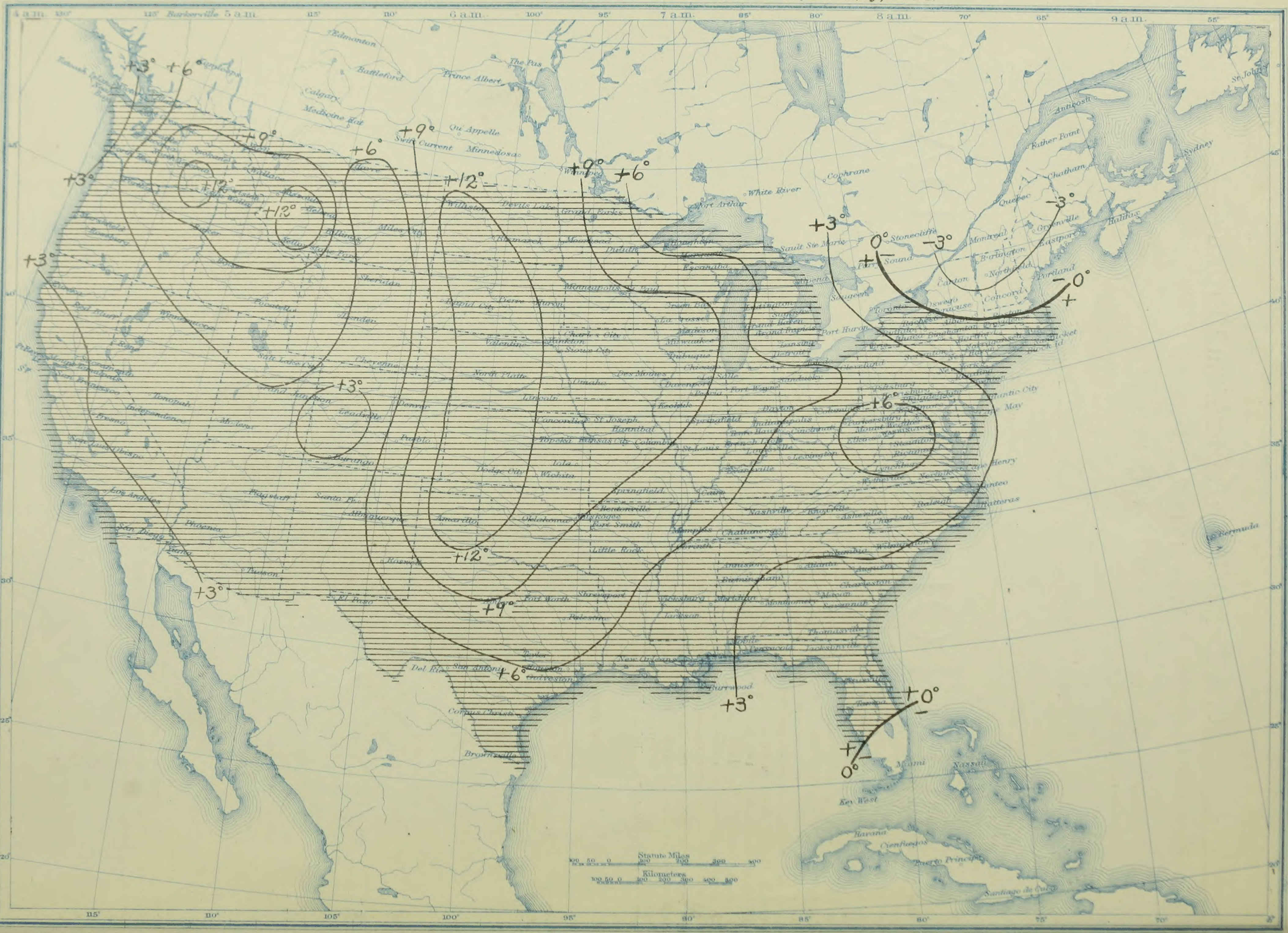
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JANUARY, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, January, 1914.



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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

Vol. XVIII. Columbia, Mo., January, 1914. No. 1

GENERAL SUMMARY.

Not since the establishment of the Climatological Service in Missouri, about 26 years ago, has such continuously mild weather been experienced as that of the present year. Practically the entire month was favorable for farm, as well as for most other outdoor occupations.

The much commented upon mildness of this mid-winter month was largely the result of what may be termed the abnormal, or at least, unusual, arrangement and distribution of atmospheric pressure in the northern hemisphere. That is to say, the arrangement was such as to cause most of the low pressure waves to move along paths much farther north of those usually followed in their passage from west to east across the American continent; while the high pressure waves, which as a rule quite frequently overspread Missouri during the winter months, on the contrary, drifted southeastward along the eastern Rocky Mountain slope, thence out eastward by way of the more southern latitudes; consequently there was a marked prevalence of southerly to westerly winds in this section.

As a result of the same causes, the precipitation was scanty. Not more than two or three stations in the entire section received the normal amount, and as a rule, the average was noticeably less than usually falls in January. The snowfall also was very light; in a number of localities it was practically inappreciable.

PRESSURE.

The mean sea-level atmospheric pressure for the section, 8 stations reporting, was 29.99 inches, or 0.15 inch lower than normal. The highest pressure was 30.64 inches, at St. Joseph on the 12th, and the least, 29.27 inches, occurred at St. Louis on the 8th. The greatest local range was 1.28 inches, at St. Joseph.

TEMPERATURE.

The monthly mean for the section, as determined from the records of 67 stations, was 38.1 degrees, which is 6.9 degrees higher than normal. It was much the mildest January of record, as may be readily seen by a glance at the comparative table at the bottom of this page. The temperature was below normal on an average of not more than a half dozen days. The excess was uniform, averaging about 6 degrees in the southeast lowlands and Ozark Plateau, and slightly higher, 7 and 8 degrees, in the northeast plain and northwest plateau, respectively. The coldest period as a rule prevailed from the 11th to the 13th, but the lowest temperature, 1 degree below zero, occurred on the 31st, and curiously enough, in the extreme southwest part of the state, at Dean, McDonald County.

HUMIDITY.

At Columbia the average humidity, 7 a. m., was 78 per cent; at Hannibal, 82 per cent; and at Kansas City and Springfield the average of the 7 a. m. and 7 p. m. readings, was 74 and 75 per cent, respectively.

PRECIPITATION.

The average for the section, 76 stations reporting, was 1.42 inches, or 0.92 inch below normal. Amounts varied from about 2 inches or more in the southeast lowlands to less than half an inch in the northwest plateau. As a rule most of the precipitation occurred during the last week, or last ten days. During the first 24 days the precipitation was almost inappreciable in the southwest plain, and in the northwest plateau the first 16 days were dry; and the other divisions from the 4th to about the 17th of the month were practically rainless. The average precipitation for each division of the state and the departure from normal were as follows: Northeast plain, 1.25 inches, a deficiency of 0.81 inch; southeast lowlands, 2.36 inches, a deficiency of 1.71 inches; Ozark plateau, 1.49 inches, a deficiency of 0.90 inch; southwest plain, 1.43 inches, a deficiency of 0.41 inch, and northwest plateau, 0.55 inch, a deficiency of 0.79 inch.

The average number of days with 0.01 inch or more precipitation was 4.

WINDS.

The prevailing winds were from the southwest. The highest velocity recorded was 45 miles an hour, from the northwest, at Kansas City on the 20th, and from the south, at St. Louis on the 23d. The average hourly velocity at stations equipped with anemometers was as follows: Columbia, 9.3 miles; Hannibal, 10.5 miles; St. Louis, 16.2 miles; St. Joseph, 9.6 miles; Kansas City, 13.0 miles; Springfield 11.5 miles; Cairo, Ill., 10.8 miles and Keokuk, Ia., 9.1 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 45, or about 13 per cent less than normal; at Kansas City the percentage of possible was 51; at Springfield, 41 and at St. Louis, 48. For the Section as a whole the average number of clear days was 14, partly cloudy days, 5, and cloudy days, 12.

COMPARATIVE DATA FOR JANUARY

	Temperature				Precipitation			
YEAR	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	21.5	−8.7	74	−32	1.91	−0.08	......	6
1889	31.8	+1.6	69	− 2	2.36	+0.37	......	6
1890	33.8	+3.6	81	−19	4.25	+2.26	......	9
1891	34.1	+3.9	74	− 1	1.52	−0.47	......	6
1892	24.0	−6.2	67	−25	1.80	−0.19	......	4
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	3
1894	31.4	+1.2	77	−35	2.21	+0.22	2.96	5
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	5
1896	32.9	+2.7	71	− 9	1.17	−0.82	2.44	4
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	8
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	9
1899	30.2	0	70	−21	1.55	−0.44	2.40	6
1900	34.5	+4.3	77	− 9	1.22	−0.77	2.30	4
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	4
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	5
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	6
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	8
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	8
1906	35.6	+5.4	76	− 8	3.64	+1.65	3.00	6
1907	34.3	+4.1	79	− 5	5.10	+3.11	4.42	12
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	5
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	7
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	5
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	5
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	4
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	8
1914	38.1	+6.9	78	− 1	1.42	−0.92	2.00	4

NOV 4

BINDING DEPT.

Climatological data for January, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	38	...	...	...	...	...	...	...	1.21	−0.79	0.90	0	5	7^{b}	0^{b}	22^{b}	sw	C. Randecker.
Brunswick	Chariton	652	35	34.8	+ 6.3	65	28	9	12†	38	1.08	−0.63	0.95	0.2	3	12	6	13	sw	Louis Benecke.
Columbia	Boone	784	25	37.7	+11.0	66	19	11	12	40	0.55	−1.68	0.26	1.6	7	4	7	20	nw	U. S. Weather Bureau.
Fayette	Howard	725	30	34.6	+ 6.7	63	28	8	12	34	1.31	−0.72	1.08	0.5	3	15	5	11	...	Prof. T. B. Smith.
Fulton	Callaway	818	23	39.0^{d}	+ 8.6	68	27	12	12†	42	0.81	−1.78	0.50	5.0	2	6^{c}	8^{c}	13^{c}	w	Russell Johnston.
Glasgow	Howard	618	36	...	...	...	...	...	...	...	1.06	−0.67	0.92	0	3	14	0	17	sw	J. J. Shaughnessy.
Gorin	Scotland	700	26	...	...	...	...	...	...	...	0.76	−0.93	0.53	1.0	5	11	4	16	nw	J. W. Pulliam.
Hannibal	Marion	534	22	35.8	+ 9.1	64	29	7	12	42	0.88	−1.32	0.41	2.6	8	7	11	13	nw	U. S. Weather Bureau.
Hermann	Gasconade	482	41	...	...	...	...	...	...	...	1.75	−0.50	0.50	7.0	7	5	7	19	nw	C. T. Maushund.
Jefferson City	Cole	628	29	35.0	+ 4.6	70	27	10	13	39	0.83	−1.45	0.45	3.0	8	15	1	15	n	Miss Emma Swift.
Keytesville	Chariton	...	0	...	...	...	...	...	...	...	1.00	...	1.00	0	1	8^{l}	3^{l}	8^{l}	...	J. T. Dewey, M. D.
Louisiana	Pike	500	37	35.4	+ 7.7	66	27	7	12	35	0.70	−1.36	0.43	4.8	6	10	7	14	w	J. T. Farrell.
Macon	Macon	881	1	35.8	...	61	27	5	12	40	1.75	...	1.56	T.	3	9	7	15	nw	John A. Cook.
Mexico	Audrain	797	37	34.1	+ 5.1	65	27	9	13	41	0.84	−1.27	0.34	2.0	6	12	3	16	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	39.3	+ 7.1	69	27	13	12†	40	1.96	−0.43	0.89	9.0	5	3	17	11	nw	E. E. Steines.
Palmyra	Marion	652	1	35.3	...	63	29	6	12	34	1.18	...	0.61	2.5	5	9	7	15	nw	W. B. Markell.
St. Catherine	Linn	914	0	35.3	...	59	28	6	12	37	1.11	...	0.92	1.5	4	8	13	10	nw	L. D. Baker.
St. Charles	St. Charles	614	37	38.6	+ 7.4	69	27	13	12†	36	3.02	+0.69	2.00	7.0	5	11	7	13	nw	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	39.7	+ 8.7	68	28	15	12	40	2.21	−0.06	0.82	6.5	9	8	11	12	nw	U. S. Weather Bureau.
St. Louis(2)	do.	578	3	38.7	...	69	27	14	12	39	2.65	...	1.01	0.8	8	8	10	13	se	St. Louis University.
Steffenville	Lewis	576	22	35.8	+ 7.6	65	27	5	12	38	1.00	−1.32	0.90	1.0	3	9	12	10	s	Frank Hall.
Sublett ‡‡	Adair	1,000	34	35.5	+ 9.0	60	28†	3	12	43	1.00	−0.73	1.00	T.	1	8	15	8	se	Lewis Spriggs.
Unionville	Putnam	1,072	22	30.0	+ 6.7	60	19	1	13	39	1.25	−0.81	0.80	3.5	4	11	5	15	s	Geo. W. Davis.
Vandalia	Audrain	796	3	36.3	...	61	28†	13	12	37	0.60	...	0.30	2.0	2	12	3	16	n	C. B. Ellis.
Warrenton	Warren	865	24	34.8	+ 5.3	68	27	11	13	40	2.22	+0.39	0.95	7.0	7	4	7	20	nw	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	9	...	...	...	...	...	...	...	2.86	...	1.10	3.0	6	13	6	12	s	D. L. Albert.
Cardwell	Dunklin	...	3	45.0^{h}	...	74	28	20	13	37	2.39	...	1.34	1.0	4	10^{a}	10^{a}	10^{a}	s	E. M. Perry.
Caruthersville	Pemiscott	...	24	44.6	+ 5.6	75	29	20	13	32	1.61	−2.37	1.07	0	3	12	2	11	se	H. E. Averill.
Doniphan	Ripley	440	10	41.0	+ 3.5	69	28	16	13	39	3.47	−0.50	1.88	3.5	5	12	8	11	nw	W. W. Martin.
Jackson	Cape Girardeau	458	24	39.8	+ 5.5	68	27	15	13	35	3.07	−0.56	1.32	5.0	6	9	3	19	s	L. M. Bean.
Marble Hill	Bollinger	420	23	41.2	+ 6.8	69	28	11	13	37	1.30	−1.94	0.60	4.0	3	13	13	5	n	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	...	...	...	...	...	...	...	2.51	−2.73	0.90	0	7	10	2	19	s	Miss Josie Smith.
Cairo, Ill.	Alexander, Ill	359	42	41.6	+ 6.8	69	28	18	13	37	1.64	−2.18	0.71	0.2	8	7	8	16	s	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	13	...	...	...	...	...	...	...	0.64	−1.49	0.22	1.0	5	11	3	17	nw	G. V. Randolph.
Bagnell	Miller	594	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	C. O. Brockmann.
Belle	Maries	1,000	23	38.8	+ 6.8	69	27	10	30	44	1.05	−1.18	0.50	8.0	3	2^{b}	13^{b}	14^{b}	s	A. J. Wofford.
Birchtree	Shannon	1,200	21	39.4	+ 4.7	65	27†	16	13	39	1.51	−1.21	0.70	4.0	4	16	5	10	nw	V. H. Kirkendall.
Bolivar	Polk	1,070	27	40.6	+ 6.1	71	19	10	30	42	1.26	−0.74	1.00	5.2	4	13	10	8	sw	T. H. B. Dunnegan.
Cassville	Barry	1,500	4	38.4	...	72	27	3	30	55	2.17	−0.24	1.82	7.0	3	14	10	7	s	Mrs. Zuma Bloomer.
Crocker††	Pulaski	1,300	3	40.5	...	78	8	13	30†	41	0.70	...	0.70	9.0	2	19	0	12	n	Roy W. Reed.
Dean.‡‡	McDonald	1,000	16	40.8^{d}	+ 3.7	73	28	−1	31	54	0.80	−1.12	0.55	5.5	2	20^{c}	1^{c}	7^{c}	sw	H. E. Dean.
Duncan	Webster	...	0	39.6	...	68	8†	12	30	44	1.70	...	0.76	8.0	5	13	6	12	s	C. A. Mingus.
Eldon	Miller	934	2	39.0	...	69	27	12	30	46	0.69	...	0.55	5.5	4	6	17	8	nw	Charles A. Kellogg.
Fruit City	Reynolds	1,150	0	38.8	...	66	27	15	13	39	1.21	...	0.50	3.0	6	15	9	7	w	R. C. Walton.
Gano ‡‡	Dent	...	11	39.2	+ 5.4	69	28	11	13	41	1.85	−1.18	0.75	8.8	6	10	9	12	nw	A. C. Leach.
Goodland	Iron	1,000	10	38.4	+ 4.4	67	28	10	13	45	1.86	−1.16	0.90	7.0	3	17	3	11	s	F. M. Adams,
Hollister	Taney	1,000	5	42.6	...	78	28	16	30	42	1.30	...	0.50	6.0	4	19	0	12	sw	W. P. Chapmann.
Houston	Texas	1,280	22	39.7	+ 5.7	67	28	14	31	44	1.10	−1.08	0.50	6.0	5	15	7	9	s	J. W. Logue.
Ironton	Iron	925	37	39.2	+ 6.9	68	28	11	13	43	2.27	−0.74	1.20	7.5	5	6	5	20	nw	W. H. Delano.
Koshkonong	Oregon	911	14	41.6	+ 4.8	69	28	18	13	34	1.59	−1.74	0.50	6.5	6	15	5	11	nw	J. W. Hitt.
Lebanon	Laclede	1,105	26	39.6	+ 6.0	68	19†	10	30	46	2.90	+0.41	1.40	7.5	6	12	6	13	w	M. W. Serl.
Lockwood	Dade	1,088	20	40.3	...	66	27	9	30	43	1.49	+0.05	1.28	5.0	2	19	2	10	nw	C. S. Crow.
Mountain Grove	Wright	1,490	16	38.4	+ 4.5	66	27†	14	30	41	1.11	−1.53	0.47	4.0	5	13^{a}	8^{a}	9^{a}	nw	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	36	40.8^{g}	+ 6.1	69	27†	6	30	44	1.55	−0.65	1.30	3.0	2	10^{g}	0^{g}	14^{g}	nw	J. R. White & Son.
Neosho	Newton	1,083	32	42.2	+ 7.1	71	27	0	30	44	1.79	−0.57	1.40	6.5	4	15^{a}	4^{a}	11^{a}	nw	W. O. Buck.
Rolla	Phelps	1,139	33	38.2	+ 7.0	70	27	15	13	39	1.22	−1.09	0.40	6.0	5	16	6	9	s	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	39.5	+ 8.2	68	8	13	30	44	1.80	−0.86	1.11	6.2	5	9	7	15	s	U. S. Weather Bureau.
Wheatland††	Hickory	920	22	...	...	...	...	...	...	...	2.00	+0.13	2.00	6.0	1	18	6	7	s	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	5	38.4	...	66	19	10	12	44	0.80	...	0.75	1.0	2	14^{a}	11^{a}	5^{a}	sw	Darby Fruit Farm.
Appelton City	St. Clair	853	24	38.4	+ 6.9	69	20	13	8†	40	1.40	−0.89	1.40	0	1	18	11	2	n	Mark Brown.
Arthur	Vernon	767	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Mrs. J. T. Armstrong.
Clinton	Henry	800	28	38.6	...	66	26†	16	12	33	1.65	−0.39	1.25	T.	2	8	13	10	sw	A. E. Derwent, M. D.
Harrisonville	Cass	912	42	35.0	+ 7.7	66	19	13	13	39	1.00	−0.55	0.87	0.2	3	10	3	18	sw	A. J. Sharp.
Joplin	Jasper	975	37	43.2	+ 6.8	68	15†	15	30	42	1.60	−0.56	1.40	3.0	2	11	7	13	nw	Joplin High School.
Lamar	Barton	964	34	38.4	+ 5.7	67	26†	12	30	36	1.62	−0.08	0.89	2.0	3	9	9	13	sw	E. H. Adams.
Lamonte	Pettis	863	26	37.0	...	65	28	12	12	40	1.45	−0.35	1.25	0	2	8	14	9	nw	J. Ed. Hall.
Marshall	Saline	779	24	36.9	+ 8.7	64	19†	10	12	28	1.40	−0.41	0.80	0.2	4	18	1	12	nw	Prof. W. H. Black.
Nevada	Vernon	860	21	...	...	...	...	...	...	...	1.52	−0.06	1.20	0.8	3	5^{c}	22^{c}	1^{c}	sw	C. Jewell.
Osceola	St. Clair	738	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W. E. Matthews.
Warrensburg	Johnson	883	36	37.7	+ 9.1	67	19	12	12	41	1.95	+0.16	1.61	0.2	4	12	8	11	sw	A. F. Smithson.
Warsaw	Benton	883	10	40.0	+ 6.4	70	19†	8	30	41	1.29	−0.97	1.03	5.0	4	12	12	7	sw	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	...	29	36.2	+ 8.8	64	19	6	12	38	1.00	−0.95	0.80	0	3	20	2	9	nw	F. G. Ashbaugh.
Bethany	Harrison	881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W. H. Skinner.
Conception	Nodaway	982	30	32.6	+ 7.6	60	19	3	12	48	0.35	−0.74	0.18	1.0	3	8	12	11	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	22	31.6	+ 7.4	60	19	3	12	43	0.85	−0.11	0.35	2.0	3	15	2	14	nw	W. H. Campbell.
Kansas City	Jackson	963	26	36.4	+10.2	65	19	10	12	30	0.28	−0.85	0.15	0.1	5	11	9	11	nw	U. S. Weather Bureau.
Kidder	Caldwell	1,017	24	33.1	+ 6.9	64	19	6	12	40	0.26	−1.09	0.16	1.0	2	13	5	13	sw	J. F. Sharp.
Lexington	Lafayette	813	33	34.6	+ 7.1	62	28	10	12	35	1.10	−0.47	0.93	0.2	3	16	0	15	w	J. W. Keithley.
Liberty	Clay	864	26	37.0	+ 8.3	63	19	10	12	43	0.05	−1.36	0.05	0.5	1	15^{b}	5^{b}	9^{b}	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	24	30.0	+ 7.6	60	19	3	12†	46	0.65	−0.53	0.45	2.0	3	18	1	12	n	J. R. Brink.
Oregon	Holt	1,113	59	33.6	+10.0	61	19	6	12	47	0.26	−1.28	0.16	1.5	3	15	5	11	nw	Tom Curry.
St. Joseph	Buchanan	825	43	33.9	...	63	19	8	12	32	0.27	−0.80	0.15	0	3	10	10	11	nw	U. S. Weather Bureau.
Tarkio	Atchison	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Prof. M. H. Rees.
Trenton	Grundy	812	20	34.5	+ 7.9	58	27	5	12	35	0.96	−0.46	0.59	1.0	5	16	3	12	s	W. H. Estes.

Estimated and incomplete data are not considered in means.

All other records are used in determining section or division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: Of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for January, 1914.

Stations.	Watershed.	Day of month-																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																
Boonville ‖	Missouri		.04																.04							.12				.90	.11		1.21
Brunswick ‖	Grand		T.																.06								.07			.95			1.08
Columbia	Missouri	.04	.01								T.							.05							T.	.08			.09	.26	.02		0.55
Fayette	......do	T.	T.																.13							.10				1.08			1.31
Fulton	......do																									.31				.50			0.81
Glasgow	......do			T.															.02											.92	.12		1.06
Gorin	Mississippi	.03																.08				.01			.11				.53			0.76
Hannibal	......do	.11	.02		T.						T.								.14				.02	T.		.08			T.	.41	.01	.09	0.88
Hermann	Missouri		.12	T.															.02						.41		.06			.34	.30	.50	1.75
Jefferson City ‖	......do		.05	.02															.03						.01		.12			.45	.10	.05	0.83
Keytesville	Chariton																	T.											1.00				1.00
Louisiana	Mississippi	T.	T.	T.		T.				T.									.08			T.	.04	T.	.02	.08				.05	T.	.43	0.70
Macon	Chariton		T.																.10				T.			.09				1.56			1.75
Mexico	Mississippi		.08	T.															.07						T.		.10			.34	.15	.10	0.84
Oakfield	Meramec		.18																.03					T.		.36				.89	.50		1.96
Palmyra	Mississippi		.32																T.				.05			.05	T.			.61		.15	1.18
St. Catherine	Grand		T.				T.												.05	T.			.03			.11			T.	.92			1.11
St. Charles	Missouri																		T.						2.00	.09				.30	.43	.20	3.02
St. Louis (1)	Mississippi	.08	.11	T.	T.														.01		T.			.54	.17	.04				.44	.72	.10	2.21
St. Louis (2)	......do		.15																.01					.55	.15	.06				.40	1.01	.32	2.65
Steffenville	......do		.03																T.				T.		T.	.07				.90			1.00
Sublett	......do									T.	T.					T.			T.										T.	1.00			1.00
Unionville	Grand																		.12				.08				.25			.80			1.25
Vandalia	Mississippi																						T.			.30				T.	.30		0.60
Warrenton	......do		.12	T.															.02						.95		.09			.31	.25	.48	2.22
Southeast Lowlands.																																
Cape Girardeau	Mississippi	.01	.40																						1.10	.15					.50	.70	2.86
Cardwell	......do			.50																					.51	.04			T.		1.34		2.39
Caruthersville	......do	T.	.32			T.													T.						.22	T.				T.	1.07		1.61
Doniphan	Black																		T.					T.	1.88	.15				.27	1.12	.05	3.47
Jackson	Mississippi		.31																					.82		.09				.33	.20	1.32	3.07
Marble Hill	......do																								.60	.40				.30			1.30
New Madrid	......do		.30	.10														.01							.60		.10				.50	.90	2.51
Cairo, Ill.	......do		.45	T.	T.	T.				T.							T.		T.	.01				.32	.39	.04			T.	.04	.37	.02	1.64
Ozark Plateau																																
Arlington	Gasconade		.08																						.22	T.				.16	.12	.06	0.64
Bagnell	Osage																																....
Belle	Meramec											T.														.25				.30	.50		1.05
Birchtree	Black																								.31	.17				.33	.70		1.51
Bolivar	Osage											.02														.19				1.00	.05		1.26
Cassville	White					T.	T.																							1.82	.23	.12	2.17
Crocker	Gasconade																													.70	.40	T.	1.10
Dean	Neosho																									.25				.55			0.80
Duncan	Osage		T.																T.						.31	.15	T.			.76	.05	.43	1.70
Eldon	......do		T.								T.								T.						T.	.09	T.			.55	.01	.04	0.69
Fruit City	Black		.50																	.06					.20	.15					.20	.10	1.21
Gano	Meramec		.17																						.15	.13				.55	.75	.10	1.85
Goodland	Black																									.26				.70		.90	1.86
Hollister	White		.20																							.35				.50		.25	1.30
Houston	Gasconade	.01																		T.	T.					T.	T.			.50	.12	.05	.42	1.10
Ironton	Mississippi		.15	T.		T.													T.	T.	T.				.75	T.	.15			.02	.60	.60	2.27
Koshkonong	Black		.14																T.					T.	.09	.30				.41	.50	.15	1.59
Lebanon	Osage																								.50		.14		.60	1.40	.12	.14	2.90
Lockwood	......do										T.															.21				1.28	T.		1.49
Mountain Grove	White		.08																						.11	.14				.31	.47		1.11
Mount Vernon	Neosho																									.25				1.30	T.		1.55
Neosho	......do																	T.								.19			T.	1.40	.15	.05	1.79
Rolla	Meramec		.09																T.						T.	.26				.40	.28	.21	1.22
Springfield	White	.02	T.		T.	T.					T.							T.	T.					.36		.19			T.	1.11	.12		1.80
Wheatland	Osage																													2.00			2.00
Southwest Plain.																																
Amoret	Osage																								T.	.05			T.	.75			0.80
Appleton City	......do																												1.40				1.40
Arthur	......do																																....
Clinton	......do																									.40				1.25			1.65
Harrisonville	......do											.03															.10		T.	.87			1.00
Joplin	Neosho	T.																		T.						.20			T.	1.40		T.	1.60
Lamar	......do											T.							T.							T.	.15		.89		.58	T	1.62
Lamonte	Missouri	T.	T.														T.							T.	.20			T.	1.25			1.45
Marshall	......do	T.	.02			T.	T.					T.							.01						T.	.57			T.	.80			1.40
Nevada	Osage	T.										.08														.24			1.20		T.		1.52
Osceola	......do																																....
Warrensburg	Missouri	T.	T.			T.					.12							T.							T.	.17			.05	1.61			1.95
Warsaw	Osage		T.			T.					.05							T.								.18			T.	1.03		.03	1.29
Northwest Plateau.																																
Avalon	Grand																		.10							.10			.80				1.00
Bethany	......do																																....
Conception	Missouri	T.	T.															.07	.18				T.			.10							0.35
Grant City	Grand	T.																		.35		T.	T.	T.			.20			.30				0.85
Kansas City	Missouri		T.			T.					.01							.03								.09			.10	.05			0.28
Kidder	Grand		T.																								.10				.16			0.26
Lexington	Missouri																		.05								.12			.93			1.10
Liberty	......do		T.								T.							.05								T.	T.						0.05
Maryville	......do		.05																.45				T.				.15						0.65
Oregon	......do	T.	T.								T.							.06								.16			.04				0.26
St. Joseph	......do	T.	T.		T.	T.					T.							.11								.15			.01				0.27
Tarkio	......do																																....
Trenton	Grand		.03				T.											.14				.04				.16			.59				0.96

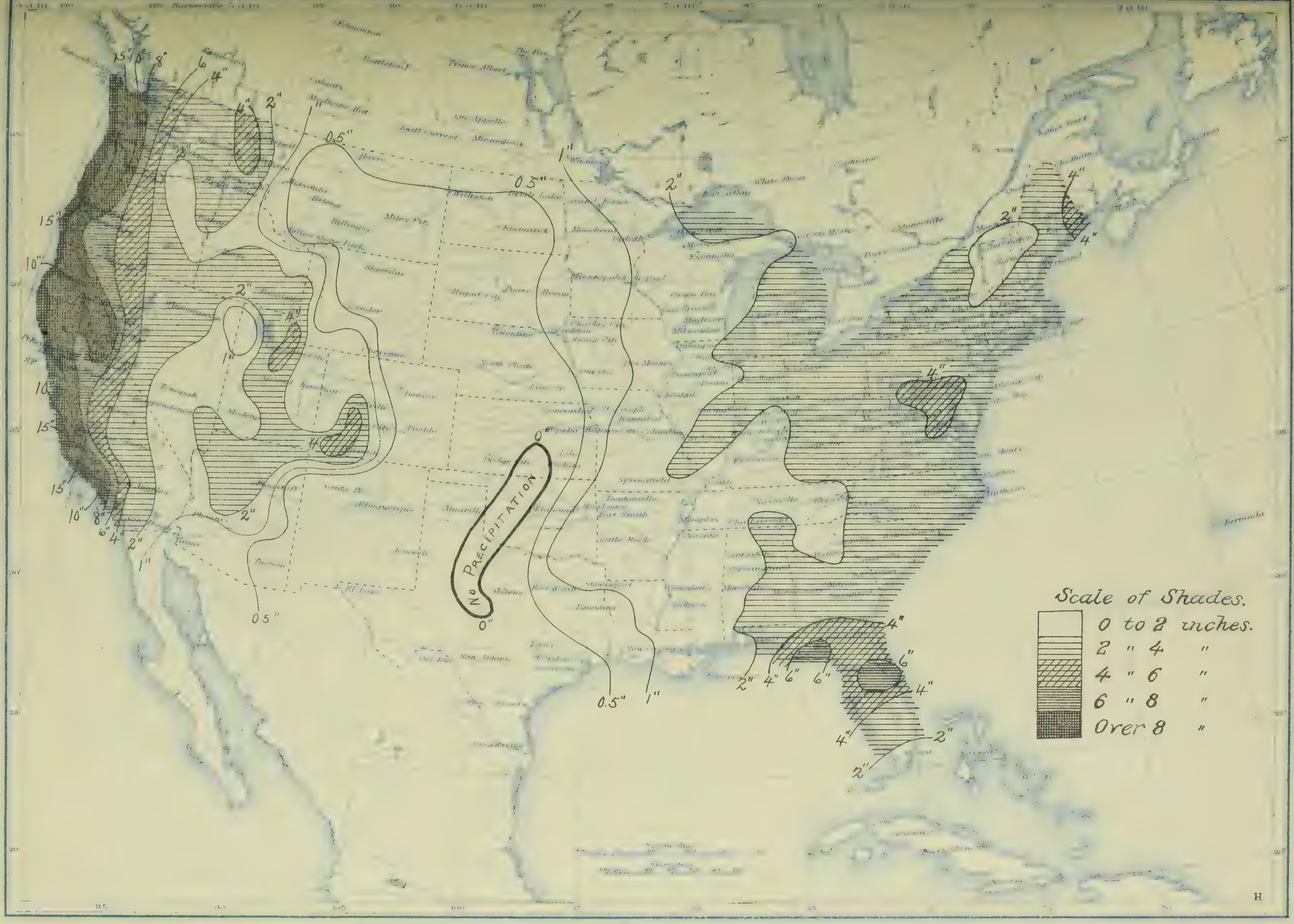
Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

Daily temperatures for January, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	38	32	30	28	25	33	51	54	35	26	45	25	47	56	56	54	42	55	63	44	34	51	60	38	35	63	64	65	43	41	43	44.4
	Minimum	28	30	25	21	26	23	24	28	29	19	19	9	9	18	28	29	31	31	35	33	20	19	25	27	26	28	31	55	25	18	19	25.2
Columbia	Maximum	42	42	29	29	28	39	54	58	40	28	44	34	46	52	58	53	43	50	66	47	32	54	60	41	38	62	64	65	63	30	43	46.3
	Minimum	29	29	25	25	24	23	31	40	26	21	23	11	16	36	32	37	32	38	42	29	21	25	41	28	28	31	52	51	23	15	22	29.2
Fayette	Maximum	37	37	27	26	24	31	50	52	34	23	40	30	43	50	54	53	40	49	62	43	32	49	59	37	33	62	61	63	58	30	42	42.9
	Minimum	27	26	22	22	20	20	24	34	22	18	20	8	12	33	29	36	29	35	38	26	19	21	37	27	27	28	48	45	20	17	25	26.3
Hannibal	Maximum	37	40	31	32	32	33	19	55	35	27	42	30	39	52	55	51	41	49	63	48	28	41	57	39	34	55	63	64	64	30	40	43.7
	Minimum	28	31	25	26	28	24	27	34	27	18	23	7	14	35	34	37	28	35	44	26	20	23	33	28	29	31	46	44	22	20	20	28.9
Jefferson City §§	Maximum	42	35	29	29	27	42	58	63	37	30	44	20	47	55	60	53	43	50	65	46	32	58	64	33	38	61	70	66	33	30	43	45.3
	Minimum	25	28	23	21	23	20	22	28	31	19	19	11	10	11	28	29	29	30	36	33	19	20	28	28	24	26	31	46	28	12	12	24.8
Macon	Maximum	36	38	30	30	30	30	50	55	46	29	42	38	45	51	55	52	43	51	58	54	31	42	58	52	33	60	61	60	60	35	41	45.1
	Minimum	27	29	24	23	25	21	26	38	26	16	21	5	12	32	31	36	27	34	42	31	17	21	31	26	26	28	43	42	20	17	23	26.5
Mexico §§	Maximum	38	31	28	30	28	34	50	58	35	28	42	22	42	51	56	52	41	51	62	45	30	52	58	32	35	49	65	64	38	28	41	42.5
	Minimum	27	28	26	25	26	24	24	29	34	20	20	10	9	10	32	33	29	29	32	33	20	21	24	30	27	28	30	45	34	20	17	25.7
Oakfield	Maximum	35	40	32	32	32	40	57	68	57	39	43	40	44	57	62	58	48	48	65	56	39	59	60	55	35	52	69	68	63	24	43	49.0
	Minimum	27	29	26	25	28	24	31	43	28	21	20	13	13	31	32	40	30	35	41	34	22	23	44	29	27	34	49	53	23	26	24	29.6
St. Catherine	Maximum	37	36	30	30	30	30	47	50	50	32	43	41	41	54	53	51	45	51	59	58	33	38	56	59	34	54	58	59	57	38	42	45.0
	Minimum	27	28	25	22	25	22	25	34	26	16	18	6	12	34	27	32	26	34	40	31	16	20	33	25	24	24	42	43	20	17	21	25.6
St. Louis (1)	Maximum	36	43	35	35	34	40	56	65	52	36	40	40	40	56	58	56	44	46	64	51	33	54	60	51	38	50	68	68	62	29	42	47.8
	Minimum	29	32	26	28	29	26	34	43	31	23	22	15	17	31	38	42	33	35	41	33	24	26	50	30	30	37	50	53	22	24	25	31.6
Sublett	Maximum	37	36	32	38	42	48	50	50	42	30	22	18	28	40	50	45	47	52	47	42	44	46	45	50	52	58	56	60	60	32	37	43.1
	Minimum	19	30	23	22	30	38	38	42	20	14	10	3	18	28	34	32	38	28	38	34	36	28	25	30	34	38	40	40	17	17	21	27.9
Unionville §§	Maximum	54	30	26	28	27	30	48	50	30	23	45	22	40	50	52	48	42	45	60	36	28	44	53	33	30	50	58	59	22	38	34	39.8
	Minimum	22	27	16	15	20	19	23	32	26	15	11	3	1	12	30	31	29	25	34	33	14	13	20	23	16	12	20	34	18	14	18	20.2
Warrenton §§	Maximum	39	36	29	30	30	37	52	64	35	30	42	21	42	53	57	52	44	48	45	36	30	52	60	33	36	53	68	63	45	36	39	43.1
	Minimum	27	29	26	24	26	24	23	29	34	21	20	12	11	13	33	34	28	29	36	26	22	22	26	32	27	28	33	47	45	19	19	26.6
Southeast Lowlands.																																	
Cardwell	Maximum	....	....	....	....	....	....	58	66	61	48	43	37	43	57	65	....	62	....	72	64	62	64	68	63	44	56	71	74	55	34	54	57.4h
	Minimum	....	....	....	33	34	32	30	42	46	25	28	26	20	21	28	....	30	....	36	46	27	28	32	32	34	32	48	52	30	28	28	32.6e
Caruthersville	Maximum	42	48	47	37	37	44	57	64	59	47	47	39	44	55	55	64	53	50	69	62	50	66	65	56	41	57	70	73	75	48	50	53.9
	Minimum	33	36	29	29	33	32	28	40	39	32	28	28	20	23	30	48	33	33	42	48	33	36	47	41	34	34	40	58	48	30	28	35.3
Doniphan	Maximum	42	43	44	38	36	42	55	60	57	42	44	41	42	54	61	59	52	45	54	52	50	61	60	56	40	53	67	69	66	39	47	50.7
	Minimum	31	33	28	28	30	29	24	36	39	24	25	24	16	21	24	34	27	36	40	33	30	22	47	38	32	36	49	53	37	24	22	31.4
Jackson	Maximum	37	42	38	38	35	41	58	63	58	43	43	39	40	53	59	59	51	45	52	52	45	61	60	59	39	64	68	64	40	41	42	49.3
	Minimum	30	33	30	27	31	29	23	38	34	24	22	21	15	26	26	39	33	37	41	36	29	23	44	35	30	37	43	30	22	22	25	30.2
Marble Hill	Maximum	38	42	44	42	35	43	63	55	61	49	45	40	40	54	60	62	52	52	51	51	55	61	59	60	56	62	64	69	62	50	45	52.3
	Minimum	29	34	35	28	30	29	38	30	35	24	23	23	11	19	23	34	40	35	34	33	30	31	28	36	36	30	31	52	30	19	22	30.1
Ozark Plateau.																																	
Birchtree	Maximum	39	40	43	35	31	44	60	63	....	41	44	38	45	56	62	58	51	44	55	50	44	63	58	52	36	54	65	65	62	28	45	49.0a
	Minimum	29	30	26	25	27	25	25	35	....	18	21	20	16	....	27	40	30	35	35	38	26	24	49	33	29	35	48	50	28	19	20	29.7b
Cassville	Maximum	50	47	39	31	28	47	62	65	46	45	47	36	38	49	58	57	47	62	67	51	48	61	62	58	50	65	72	67	65	25	49	51.4
	Minimum	38	29	20	21	22	22	29	35	31	21	19	25	19	20	24	24	24	7	31	32	26	21	21	31	29	32	54	55	20	3	7	25.5
Duncan	Maximum	42	41	38	33	27	44	61	68	59	37	44	38	49	55	61	60	50	50	68	56	46	62	59	55	37	58	67	67	64	24	41	50.4
	Minimum	29	28	22	23	24	21	31	39	33	19	21	20	18	29	37	41	28	36	38	34	24	21	43	30	27	32	45	52	20	12	16	28.8
Eldon	Maximum	41	42	31	28	30	43	59	64	50	33	45	38	48	54	62	55	45	52	67	55	36	59	62	56	38	64	69	66	65	30	44	49.4
	Minimum	28	28	23	23	22	22	31	42	27	21	22	14	14	32	30	38	32	37	37	33	22	24	46	25	26	31	51	50	19	12	21	28.5
Fruit City	Maximum	35	38	42	39	30	42	59	65	57	40	43	38	43	55	62	58	50	42	54	48	43	63	57	55	41	51	66	65	46	28	44	48.4
	Minimum	27	30	27	25	28	27	28	37	35	20	20	19	15	16	33	44	32	35	39	38	26	25	47	32	28	31	30	36	28	25	22	29.2
Gano	Maximum	36	40	36	29	28	42	60	66	56	35	44	39	40	56	60	55	50	47	66	54	40	62	62	54	35	52	65	69	63	30	44	48.9
	Minimum	26	30	25	26	25	22	28	49	30	17	22	17	11	29	30	40	30	35	39	35	30	21	47	29	25	33	49	50	30	18	20	29.6
Hollister	Maximum	50	38	44	32	34	48	66	74	76	56	54	36	54	64	68	48	50	62	62	52	54	56	62	42	44	66	76	78	44	34	48	53.9
	Minimum	36	34	22	26	28	24	28	34	40	20	18	20	18	22	26	42	40	38	36	34	32	20	48	36	34	36	48	50	38	16	28	31.4
Ironton §§	Maximum	38	41	38	31	32	44	57	64	42	41	44	28	44	55	63	58	46	42	55	49	38	61	60	45	38	52	63	68	56	27	46	47.3
	Minimum	28	35	29	26	29	26	28	35	30	20	21	20	11	25	24	45	32	33	38	35	27	18	48	43	28	33	44	45	56	21	24	31.0
Lebanon	Maximum	42	42	37	35	34	42	58	60	53	52	43	41	47	54	60	58	53	50	68	66	41	60	63	57	39	58	68	66	66	40	48	51.6
	Minimum	28	30	25	24	25	24	40	33	33	21	34	20	15	28	24	29	37	36	55	25	22	22	23	33	27	33	24	32	20	10	18	27.7
Mountain Grove	Maximum	41	39	40	34	29	43	56	63	61	39	41	37	41	56	64	53	49	47	62	54	43	....	62	57	36	57	66	66	63	26	41	47.3a
	Minimum	30	27	22	22	23	20	31	37	31	17	20	20	16	28	34	37	30	35	38	35	22	....	27	35	25	22	46	52	22	14	18	27.0a
Neosho	Maximum	52	47	38	31	28	47	63	66	60	38	48	42	53	60	68	64	53	64	68	64	48	65	64	59	53	66	71	67	67	11	50	55.1
	Minimum	35	29	19	24	22	23	32	38	33	20	19	27	20	31	28	40	32	37	33	36	26	24	53	31	30	32	56	52	22	0	6	29.4
Rolla	Maximum	35	41	32	35	29	44	51	64	65	37	35	45	49	52	55	62	55	45	59	60	40	53	61	50	35	42	70	60	66	30	36	48.2
	Minimum	26	29	25	23	24	23	31	41	32	19	20	16	15	20	29	39	32	36	42	30	24	23	35	30	26	33	46	46	27	16	20	28.3
Springfield	Maximum	46	42	34	26	25	43	60	68	45	32	43	35	48	55	64	55	43	51	65	53	38	60	60	46	40	65	67	66	64	26	44	48.7
	Minimum	32	26	21	23	22	21	34	45	26	22	20	22	22	33	38	40	33	38	41	35	25	32	46	27	27	32	50	53	20	13	20	30.3
Southwest Plain.																																	
Amoret	Maximum	45	45	37	....	32	39	51	55	48	32	45	42	46	56	55	52	58	45	66	54	44	57	60	53	42	58	63	65	64	38	48	49.8a
	Minimum	31	27	20	....	19	21	30	36	29	22	12	10	16	34	30	27	36	36	33	36	23	26	46	27	23	28	49	46	20	15	25	26.9a
Clinton	Maximum	47	45	35	29	28	41	54	59	47	33	15	39	39	54	61	56	56	58	62	58	42	57	60	42	40	66	60	66	55	36	47	48.9
	Minimum	31	30	22	24	21	22	30	39	31	23	15	16	17	34	35	35	36	38	31	35	34	25	30	21	25	29	35	47	22	19	24	28.3
Harrisonville §§	Maximum	44	34	33	27	25	37	50	53	35	28	45	22	46	53	57	52	40	54	66	47	35	54	59	35	34	58	60	63	26	37	45	43.7
	Minimum	29	30	20	20	20	20	24	30	32	30	16	18	13	20	30	32	36	33	40	35	23	22	25	35	23	28	30	47	24	17	17	26.4
Lamar §§	Maximum	51	33	37	25	34	43	58	65	40	34	45	29	50	55	65	55	47	58	66	51	42	60	60	42	45	67	67	66	27	32	50	48.3
	Minimum	30	32	21	21	22	23	25	33	33	22	17	24	22	27	32	35	34	35	42	37	26	25	34	33	28	31	32	53	26	12	14	28.4
Lamonte	Maximum	43	37	30	28	26	38	48	55	47	30	43	37	46	52	57	53	43	46	65	47	37	46	58	50	36	62	63	65	60	34	46	46.1
	Minimum	32	29	22	23	21	22	30	57	30	21	20	12	19	32	37	35	32	30	33	37	22	28	39	24	24	28	42	41	20	19	26	27.9
Marshall	Maximum	39	38	30	28	26	33	49	51	44	30	43	38	44	51	54	54	42	52	64	54	35	50	60	50	35	62	61	64	63	38	43	46.1
	Minimum	36	28	21	23	23	22	27	37	29	19	20	10	14	31	28	37	32	32	37	32	20	24	40	25	25	28	48	43	20	17	24	27.7
Warrensburg	Maximum	44	43	30	27	24	38	50	56	46	28	44	36	47	53	51	54	47	55	67	57	35	54	58	51	37	63	63	63	61	36	45	47.1
	Minimum	31	29	21	23	20	22	32	39	28	21	19	12	15	35	31	38	33	37	41	34	22	25	41	25	25	29	41	43	20	19	27	28.3
Warsaw	Maximum	45	43	31	29	29	45	56	65	56	34	40	42	54	56	64	58	52	59	70	63	45	63	62	46	42	68	70	69	62	35	46	51.7
	Minimum	32	30	22	25	22	23	31	31	34	18	20	17	14	34	27	36	27	40	33	36	25	22	37	27	26	32	55	47	22	8	19	28.2
Northwest Plateau.																																	
Albany	Maximum	36	38	30	29	26	30	50	51	19	29	41	14	41	54	53	51	47	53	64	56	33	45	55	53	33	57	60	59	59	40	40	45.6
	Minimum	27	28	23	23	22	21	25	34	27	17	19	6	11	33	29	34	29	35	38	31	17	22	36	28	24	24	45	43	29	19	25	26.7
Grant City	Maximum	35	25	29	21	27	31	51	47	37	27	43	37	45	54	51	48	40	45	60	51	30	35	46	36	33	48	55	55	55	45	37	41.4
	Minimum	25	22	19	19	18	19	24	33	22	12	17	3	12	30	28	25	27	33	38	28	13	19	31	16	18	11	35	37	[illegible]	12	23	21.9
Kansas City	Maximum	42	36	33	25	24	36	54	52	38	28	45	34	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44.3
	Minimum	31	26	21	20	18	23	34	38	28	21	20	10	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28.4
[illegible] §§	Maximum	38	29	28	24	25	32	40	39	30	25	46	22	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.8
	Minimum	30	28	22	22	22	24	27	31	28	18	19	6	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.4
Lexington §§	Maximum	42	31	30	28	23	33	50	55	37	28	45	23	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43.0
	Minimum	29	29	20	23	21	21	28	28	29	20	20	10	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.2
Maryville §§	Maximum	37	29	29	22	28	32	51	46	29	25	43	21	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40.1
	Minimum	21	25	17	18	18	19	19	30	22	14	11	3	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.9
Oregon	Maximum	36	[illegible]	27	24	24	33	50	48	38	28	42	35	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.7
	Minimum	29	[illegible]	16	18	17	20	29	34	24	16	18	6	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24.6
St. Joseph	Maximum	[illegible]	36	27	21	23	35	54	49	36	25	44	28	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.2
	Minimum	[illegible]	23	17	19	18	23	29	36	25	18	22	8	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.6
Tarkio	Maximum	[illegible]	36	29	26	30	31	47	48	48	29	43	40	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43.3
	Minimum	[illegible]	28	23	22	21	21	25	32	25	16	21	5	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.7

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to [illegible] always occurs.



Scale of Shades.
0 to 2 inches.
2 " 4 "
4 " 6 "
6 " 8 "
Over 8 "
No PRECIPITATION
0"
0.5"
1"
2"
4"
6"
8"
10"
15"
Bermuda
H

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

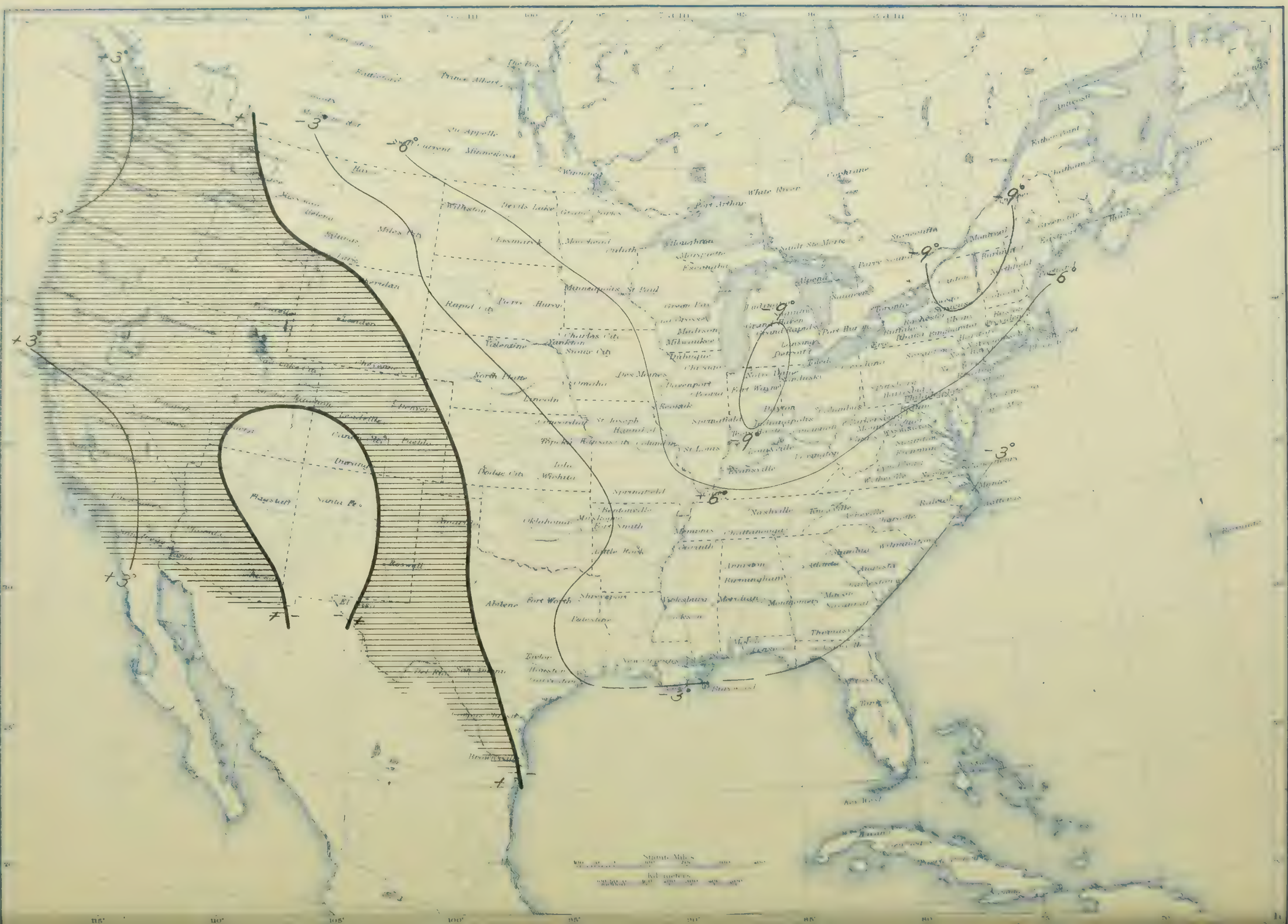
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

FEBRUARY, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, February, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

VOL. XVIII. COLUMBIA, MO., FEBRUARY, 1914. No. 2

GENERAL SUMMARY.

February, 1914, was cold and stormy. It was in marked contrast to the preceding month, January, which was comparatively dry and noticeably mild. There were four well-defined storm periods, 5-6th, 12-13th, 18-19th, and 22-23d; and in addition to these a strong westerly wind prevailed during the afternoon and night of the 28th. All were accompanied by sleet and snow, save the last which commenced and ended with a clear or nearly clear sky. The storms of the 12-13th, and 22-23d gave the heaviest snows as a rule; the latter developed high east to northeast winds, that reached, especially over the northeast plain district, velocities of 40 to 47 miles an hour; at Columbia maximum velocities, for periods of five minutes or more, occurred each hour from noon of the 22d to 5 a.m. of the 23d. Snow drifted badly, filling railroad cuts and highways to such a depth that most traffic and business was demoralized for several hours. During the afternoon of the 28th a westerly wind set in which gradually veered to northwest, and steadily increased until after midnight; between 6 p. m. and midnight it reached the velocity of a strong gale. At Kansas City the highest velocity was 53 miles an hour; at Columbia, 42, and at St. Louis 60 miles an hour; the greatest damage done to property was, apparently, confined to St. Louis and its vicinity, where windows were blown in, chimneys blown down, and roofs blown off or damaged; several persons were more or less seriously injured by flying fragments.

PRESSURE.

The mean sea-level atmospheric pressure for the section, 8 stations reporting, was 30.18 inches, or 0.07 inch higher than normal. The highest pressure was 30.69 inches, at St. Joseph on the 24th, and the least, 29.59 inches, occurred at Springfield on the 22d. The greatest local range was 1.02 inch, at St. Louis.

TEMPERATURE.

The month was colder than usual throughout the State, the temperature deficiency amounting to about 4.7 degrees in the northeast plain, 1.8 degrees in the southeast lowlands, 2.4 degrees in the Ozark plateau, 2.5 degrees in the southwest plain, and 3 degrees in the northwest plateau. Temperatures were below normal most of the month, but there were no unusually low minimum temperatures, the lowest reported being 11 degrees below zero.

The monthly mean for the Section, as a whole, 65 stations reporting, was 28.3 degrees, or 2.3 degrees lower than normal. The first two or three days were mild, as also were the 16th and 17th, and the 26th. The lowest temperatures occured during the first cold wave, 5-8th, when temperatures ranged from about zero to 10 degrees or more below zero; from the 22d to 24th was another cold period, but not as cold as the former. The average number of days with temperature 32 degrees or lower was 26 in the northeast plain; 23, southeast lowlands; 24, Ozark plateau; 25, southwest plain; 26, northwest plateau, and 25 for the Section as a whole.

HUMIDITY.

At Columbia the average relative humidity, 7 a. m., was 83 per cent; at Hannibal, 83 per cent; at St. Louis and Springfield the average of the 7 a. m. and 7 p. m. readings, was 74 and 77 per cent, respectively.

PRECIPITATION.

The average precipitation for the section, as determined, from the records of 74 stations, was 2.71 inches, which is 0.42 inch greater than normal. The precipitation of the month, a considerable part of which was in the form of sleet and snow, exceeded the normal amount at the majority of stations, except in the north extending from Livingston County northeast to Clark, where amounts were slightly less than normal. The precipitation, as a whole, was well distributed both as to time and geograpically; the heaviest amounts occurred in the Osage and Gasconade watersheds, while the least amounts were generally confined to the Grand and Charitan watersheds. The average for each division and departure from normal was as follows: northeast plain, 2.54 inches, an excess of 0.40 inch; southeast lowlands, 4.22 inches, an excess of 0.79 inch; Ozark plateau, 2.77 inches, an excess of 0.36 inch; southwest plain, 2.84 inches, an excess of 0.62 inch, and northwest plateau, 1.74 inches, an excess of 0.17 inch.

Snows were frequent and heavy. The average for each division was as follows: northeast plain, 17.8 inches: southeast lowlands, 5.0 inches; Ozark plateau, 11.8 inches; southwest plain, 17.4 inches, and northwest plateau, 13.2 inches. The greatest local monthly fall was 31 inches, at Oakfield.

The average number of days with 0.01 inch or more precipitation was 7.

WINDS.

The prevailing winds were from the northeast. The highest velocity recorded was 60 miles an hour, from the northwest, at St. Louis on the 28th. The average hourly velocity at stations equipped with anemometers was as follows: Columbia, 10.1 miles; Hannibal, 10.9 miles; St. Louis, 13.8 miles; Springfield, 11.2 miles; Kansas City, 13.5 miles; and St. Joseph, 9.9 miles. Cairo, Ill., 10.5 miles and Keokuk, Ia., 9.4 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 53, or about 3 per cent below normal. At St. Louis the percentage of possible was 55; at Springfield, 50; at Kansas City, 51, and at St. Joseph, 55. For the Section, the average number of clear days was 12, partly cloudy days, 6, and cloudy days, 10.

COMPARATIVE DATA FOR FEBRUARY

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	33.0	+2.0	73	−11	2.04	−0.28	......	7
1889	29.3	−1.7	73	− 9	2.57	+0.25	......	7
1890	35.5	+4.5	81	− 7	2.24	−0.08	......	7
1891	32.7	+1.7	76	− 8	2.28	−0.04	......	6
1892	37.7	+6.7	71	2	4.15	+1.83	......	9
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	6
1894	30.8	−0.2	72	−12	2.52	+0.20	2.60	6
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	5
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	5
1897	34.8	+3.8	74	−15	2.30	−0.02	3.60	7
1898	35.4	+4.4	78	− 9	1.62	−0.70	2.90	5
1899	20.4	−10.6	72	−32	2.17	−0.15	4.30	6
1900	26.2	−4.8	70	−16	3.92	+1.60	2.85	10
1901	28.1	2.9	76	−19	1.63	−0.69	2.36	6
1902	24.0	−7.0	72	−17	1.50	−0.82	2.35	5
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	7
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	5
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	8
1906	33.7	+2.7	73	−13	2.28	0.04	2.40	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	6
1908	35.6	+4.6	78	− 7	4.32	+2.00	1.28	9
1909	38.8	+7.8	71	− 4	3.38	+1.06	2.50	9
1910	28.3	−2.7	72	−24	1.98	−0.34	3.00	6
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	8
1912	28.3	−2.7	72	−12	2.45	+0.13	3.20	6
1913	29.8	−1.7	78	− 9	2.21	−0.18	4.78	7
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	7

Climatological data for February, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. of 0.01 or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville††	Cooper	600	38	.....	.....	.....	.....	.....	.....	...	1.62	−1.10	0.75	2.5	6	11	1	13	ne.	C. [illegible]
Brunswick	Chariton	652	35	25.3	−3.4	57	2	−5	7†	41	2.23	+0.27	0.91	14.0	7	15	1	12	[illegible]	[illegible]
Columbia	Boone	784	25	25.6	−4.5	55	2	−3	7	31	2.51	+0.38	0.98	15.1	9	8	8	12	ne.	U. S. Weather Bureau.
Fayette	Howard	725	31	2.24	−6.7	53	2	−8	7	41	1.89	−0.21	0.80	13.6	6	15	5	8	[illegible]	Prof. T. B. [illegible]
Fulton	Callaway	818	23	26.7	−3.1	58	17	−2	7	[illegible]	2.65	+0.51	1.00	18.5	9	10	6	10	w.	[illegible]
Glasgow††	Howard	618	36	.....	.....	.....	.....	.....	.....	...	1.72	−0.58	0.62	13.0	6	15	9	[illegible]	e.	J. J. [illegible]
Gorin	Scotland	700	28	.....	.....	.....	.....	.....	.....	...	0.94	−0.72	0.30	5.8	6	5	9	14	ne.	J. W. [illegible]
Hannibal	Marion	534	22	23.0	−6.1	53	2	−4	25	34	2.91	+1.31	1.02	20.7	8	15	6	9	ne.	U. S. Weather Bureau.
Hermann	Gasconade	482	41	.....	.....	.....	.....	.....	.....	...	2.28	−0.18	0.94	23.0	11	12	4	12	ne.	C. T. [illegible]
Jefferson City	Cole	628	32	24.8	−6.0	60	17	−1	7†	57	3.23	+0.99	1.45	23.5	8	16	6	12	n.	M[illegible] Scott.
Keytesville	Chariton	...	1	.....	.....	.....	.....	.....	.....	...	1.85	.....	0.67	12.7	7	.....	.....	.....	.....	J. T. [illegible], M. D.
Louisiana	Pike	500	37	23.3	1.8	51	2	−7	25	12	1.90	−0.59	0.80	15.4	7	15	8	5	ne.	J. J. [illegible]
Macon	Macon	881	2	24.2	.....	53	2	−7	7	37	1.97	.....	0.70	14.0	8	10	12	6	w.	[illegible]
Mexico	Audrain	797	37	23.1	−5.5	56	2	−1	7†	51	3.41	+0.93	1.08	23.9	12	11	2	12	ne.	J. F. [illegible]
Oakfield‡‡	Franklin	793	23	27.5	−4.2	62	17	−1	7	40	4.02	1.14	1.29	31.0	8	6	14	8	ne.	L. L. [illegible]
Palmyra	Marion	652	2	23.0	.....	51	3†	−7	25	32	3.80	.....	1.50	17.8	7	7	11	10	ne.	W. B. [illegible]
St. Catharine	Linn	914	1	23.4	.....	52	2	−9	7	31	1.70	.....	1.05	15.2	6	10	12	6	nw.	L. D. Baker.
St. Charles	St. Charles	614	37	25.6	−5.9	61	17	0	7†	43	3.59	+0.61	1.39	17.5	6	12	6	10	ne.	L. C. [illegible]
St. Louis (1)	St. Louis City	567	41	27.4	−6.1	62	17	1	7	40	4.63	+1.88	1.92	23.5	10	13	6	9	ne.	U. S. Weather Bureau.
St. Louis (2)††	do	578	3	26.2	.....	62	17	1	7	37	4.98	.....	1.45	28.3	10	15	3	10	nw.	St. Louis University.
Steffenville	Lewis	576	22	23.9	−2.9	51	2	−5	7	43	1.87	−0.17	0.50	18.5	8	8	11	6	w.	[illegible] Hall.
Sublett‡‡	Adair	1,000	31	21.9	−2.9	50	2	−8	7	39	2.09	−0.01	0.80	19.0	5	12	8	8	nw.	Lewis [illegible]
Unionville	Putnam	1,072	22	20.4	−3.6	56	17	−9	8	55	1.86	−0.12	0.80	17.5	4	12	5	11	ne.	Geo. W. [illegible]
Vandalia	Audrain	796	3	25.0	.....	48	2	−1	7	33	1.65	.....	1.00	16.0	3	15	2	11	n.	C. B. Ellis.
Warrenton	Warren	865	24	23.9	−5.5	61	17	−3	7†	59	2.94	+0.40	1.20	15.5	10	10	6	12	n.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	.....	.....	.....	.....	.....	.....	...	4.09	+1.73	2.80	6.0	7	17	4	7	s.	D. L. Albert.
Cardwell	Dunklin	...	3	38.4	.....	75	26	10	6	28	3.41	.....	1.16	.....	8	12	5	11	nw.	E. M. [illegible]
Caruthersville	Pemiscott	...	21	38.4	+1.0	70	17	11	7	12	4.98	+0.79	1.04	T.	9	15	2	11	e.	H. [illegible]
Doniphan	Ripley	410	10	34.4	−2.5	65	17	6	7	11	1.74	−0.54	1.27	7.0	6	13	6	9	s.	W. W. [illegible]
Jackson	Cape Girardeau	458	24	34.4	−0.4	63	16†	6	21	40	4.09	+1.28	2.80	10.0	7	4	9	15	n.	L. M. [illegible]
Marble Hill	Bollinger	420	23	31.8	−2.9	63	17	1	21	41	3.30	−0.37	[illegible]	5.0	7	9	8	11	n.	Dr. A. [illegible] Hendricks.
New Madrid	New Madrid	285	21	.....	.....	.....	.....	.....	.....	...	5.23	+1.02	1.56	3.0	13	10	2	16	n.	Miss Josie [illegible]
Cairo, Ill	Alexander, Ill	359	13	33.4	−4.2	61	17	9	7	59	3.85	+0.52	2.02	3.9	10	9	5	14	n.	U. S. Weather Bureau.
Ozark Plateau.																				
[illegible]	Phelps	695	16	.....	.....	.....	.....	.....	.....	...	1.98	−1.00	1.10	25.6	9	15	1	12	ne.	G. V. Randolph.
[illegible]	Miller	591	6	.....	.....	.....	.....	.....	.....	...	1.55	.....	1.20	15.5	4	8	4	16	w.	C. O. [illegible]
[illegible]	Maries	1,000	23	28.5	−3.4	59	17	−1	7	44	3.68	+1.05	1.30	24.5	6	5	11	12	n.	A. J. Wofford.
[illegible]	Shannon	1,200	21	32.3	−1.7	67	17	2	7	41	2.94	+0.65	0.87	5.5	6	16	3	9	s.	V. H. Kirkendall.
[illegible]	Polk	1,070	27	32.8	−0.7	62	17	−1	7	34	2.83	+1.49	0.80	14.2	8	11	11	6	sw.	T. H. B. [illegible]
[illegible]	Barry	1,500	4	31.8	.....	64	17	0	7	44	1.18	.....	0.62	2.0	4	16	7	5	s.	Mrs. Zuma Bloomer.
[illegible]	Pulaski	1,300	3	31.9	.....	62	17	−2	7†	33	2.70	.....	1.30	17.0	3	16	0	0	.....	[illegible] W. Reed.
[illegible]	McDonald	1,000	16	34.8	1.1	65	17	−2	7	44	1.58	−0.43	0.89	2.0	3	14ᵇ	3ᵇ	9ᵇ	w.	H. E. [illegible]
[illegible]	Webster	....	1	30.9	.....	62	17	−2	7	40	2.43	.....	0.66	11.0	9	13	1	11	s.	C. A. Mingus.
[illegible]	Miller	931	2	28.7	.....	60	17	−2	7	40	3.19	.....	1.60	21.5	8	8	14	6	nw.	Charles A. Kellogg.
[illegible]	Reynolds	1,150	1	32.2	.....	66	17	3	7	38	2.38	.....	1.20	4.5	5	12	9	7	w.	R. C. [illegible]
[illegible]	Dent	....	11	29.6	4.6	63	17	0	7	40	3.37	+0.61	1.34	16.9	8	13	4	11	ne.	A. C. Leach.
[illegible]	Iron	1,000	10	29.8	3.2	65	17	2	7	45	3.14	+0.04	1.50	.....	8	11	2	15	s.	F. M. Adams.
[illegible]ster	Taney	1,000	5	34.8	.....	64	17†	4	7	40	2.20	.....	0.60	1.5	7	18	0	10	sw.	W. P. Chapmann.
[illegible]	Texas	1,280	22	30.2	3.1	64	17	0	7	37	3.99	+1.51	1.34	8.0	8	13	3	12	s.	J. W. [illegible]
[illegible]	Iron	925	27	30.4	3.0	65	17	3	7	40	3.39	+0.08	1.60	12.0	7	11	5	12	ne.	W. H. Delano.
[illegible]	Oregon	941	13	34.2	2.2	68	17	4	7	40	3.95	+0.84	1.57	7.0	8	14ᶜ	1ᶜ	10ᶜ	nw.	J. W. Hitt.
[illegible]	Laclede	1,105	27	31.8	−1.9	63	17	−2	7	40	3.04	+0.90	0.77	15.0	9	14	3	11	sw.	O. L. Weissgerber.
[illegible]	Dade	1,088	20	32.0	.....	58	22	0	7	35	22.7	+0.07	1.28	9.0	5	15	1	12	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	31.0	−2.3	64	17	−5	7	42	1.62	−1.09	0.52	7.0	8	13	3	12	nw.	Mo. Fruit Exp. Sta.
[illegible]	Lawrence	1,480	35	31.8	−1.6	63	17	−1	7	39	1.75	−1.09	1.10	5.0	3	15	5	8	se.	J. R. White & Son.
[illegible]	Newton	[illegible]	32	35.8	0.1	67	17	0	7	40	1.98	−0.54	0.80	5.0	7	18	3	7	sw.	W. O. Buck.
[illegible]	Phelps	[illegible]	23	30.4	5.2	61	17	2	7	37	3.98	+1.54	1.77	27.0	7	15	4	9	n.	Prof. Elmo G. Harris.
[illegible]	Greene	[illegible]	27	31.2	2.1	62	17	−2	7	35	2.26	−0.01	1.16	7.5	9	12	4	12	se.	U. S. Weather Bureau.
[illegible]	Hickory	925	22	.....	.....	.....	.....	.....	.....	...	4.55	+2.54	1.20	26.0	7	10	9	9	s.	Mrs. S. A. Jackson.
[illegible]																				
[illegible]	Bates	[illegible]	6	29.6	.....	60	2	−3	7	40	2.67	.....	0.90	13.0	7	10	10	8	ne.	Darby Fruit Farm.
[illegible]	St. Clair	[illegible]	[illegible]	.....	.....	.....	.....	.....	.....	...	2.57	−0.11	1.65	26.0	4	11	7	10	n.	Mark Brown.
[illegible]	Henry	[illegible]	27	30.1	.....	65	11	1	7	45	3.55	+1.59	1.50	17.0	6	6	17	5	ne.	A. E. Derwent, M. D.
[illegible]	Cass	912	11	26.0	3.5	[illegible]	2	3	7†	41	2.47	+0.30	1.10	14.3	7	9	5	14	ne.	A. J. Sharp.
[illegible]	Jasper	[illegible]	30	36.5	0.1	65	17†	0	7	33	2.95	+0.64	0.80	5.5	7	11	2	12	n.	Joplin High School.
[illegible]	[illegible]	964	34	31.5	2.6	63	17	0	7†	41	2.50	+0.15	0.99	11.0	7	9	6	13	s.	E. H. Adams.
[illegible]	Pettis	863	24	25.9	.....	56	2	−3	7	37	1.70	−0.32	0.49	17.0	6	2	20	6	ne.	J. Ed. Hall.
[illegible]	Saline	779	24	25.9	2.8	55	2	−4	7	31	2.71	+0.75	0.80	21.1	9	15	4	9	nw.	Prof. W. H. Black.
[illegible]	Vernon	860	21	.....	.....	.....	.....	.....	.....	...	2.67	+0.49	0.80	25.2	8	5	20	3	nw.	C. Jewell.
[illegible]	St. Clair	738	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. F. Matthews.
[illegible]	Johnson	883	36	27.4	[illegible]	[illegible]	2	3	7	37	2.71	+0.62	0.87	18.7	9	13	7	8	sw.	Geo. H. Collins.
[illegible]	Benton	883	16	30.8	2.8	[illegible]	17	0	7	[illegible]	3.61	+0.63	1.54	22.5	8	12	10	6	e.	J. R. Smith, M. D.
[illegible]																				
[illegible]	Livingston	...	30	25.3	[illegible]	[illegible]	[illegible]	[illegible]	7	41	1.75	−0.49	0.75	16.5	4	13	1	14	nw.	F. G. Ashbaugh.
[illegible]	Harrison	881	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Skinner.
[illegible]	[illegible]laway	982	29	22.6	[illegible]	[illegible]	[illegible]	11	7	41	1.15	+0.08	0.50	11.5	5	12	8	8	se.	Fr. Adelhelm Hess.
[illegible]	Worth	1,130	21	[illegible]	[illegible]	[illegible]	[illegible]	0	7	24	0.80	−0.43	0.29	8.0	5	15	4	11	nw.	W. H. Campbell.
[illegible]	Jackson	963	26	26.8	[illegible]	[illegible]	17	1	[illegible]	34	2.40	+0.81	0.87	14.3	9	7	11	10	n.	U. S. Weather Bureau.
[illegible]	Caldwell	1,017	25	24.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	−0.07	0.70	13.3	7	11	7	10	ne.	J. L. [illegible]
[illegible]	Lafayette	843	33	25.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.27	[illegible]	0.80	13.7	8	15	0	13	n.	J. W. [illegible]
[illegible]	Clay	864	26	28.0	[illegible]	[illegible]	17	[illegible]	[illegible]	38	[illegible]	[illegible]	0.27	16.0	5	13	7	8	e.	W. C. [illegible]
[illegible]	[illegible]laway	1,160	24	19.8	[illegible]	[illegible]	[illegible]	11	7†	18	1.52	0.29	0.60	15.0	8	15	4	9	nw.	[illegible] R. [illegible]
[illegible]	[illegible]	1,113	50	21.6	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	1.60	0.69	0.72	11.0	4	12	[illegible]	9	nw.	Tom Carr.
[illegible]	Buchanan	[illegible]	13	24.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	1.82	0.44	1.05	15.6	8	10	8	10	ne.	U. S. Weather Bureau.
[illegible]	[illegible]	.....	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. H. Rees.
[illegible]	[illegible]	[illegible]	20	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	30	[illegible]	0	0.70	10.4	7	12	6	10	ne.	W. H. [illegible]

[illegible] data are not considered in means.

[illegible] in determining [illegible] means, but the mean departures from normal temperature and precipitation are based only on records from [illegible]

[illegible] indicate number of days missing; for example, b represents two days, etc.

[illegible] ‡‡ Post-office addresses of these stations are as follows: [illegible] of Oakfield, Pacific, R. F. D. [illegible] Sublett [illegible] R. F. D. [illegible] Sublett of Mt. Vernon, Aurora R. F. D. No. 1.

Daily precipitation for February, 1914.

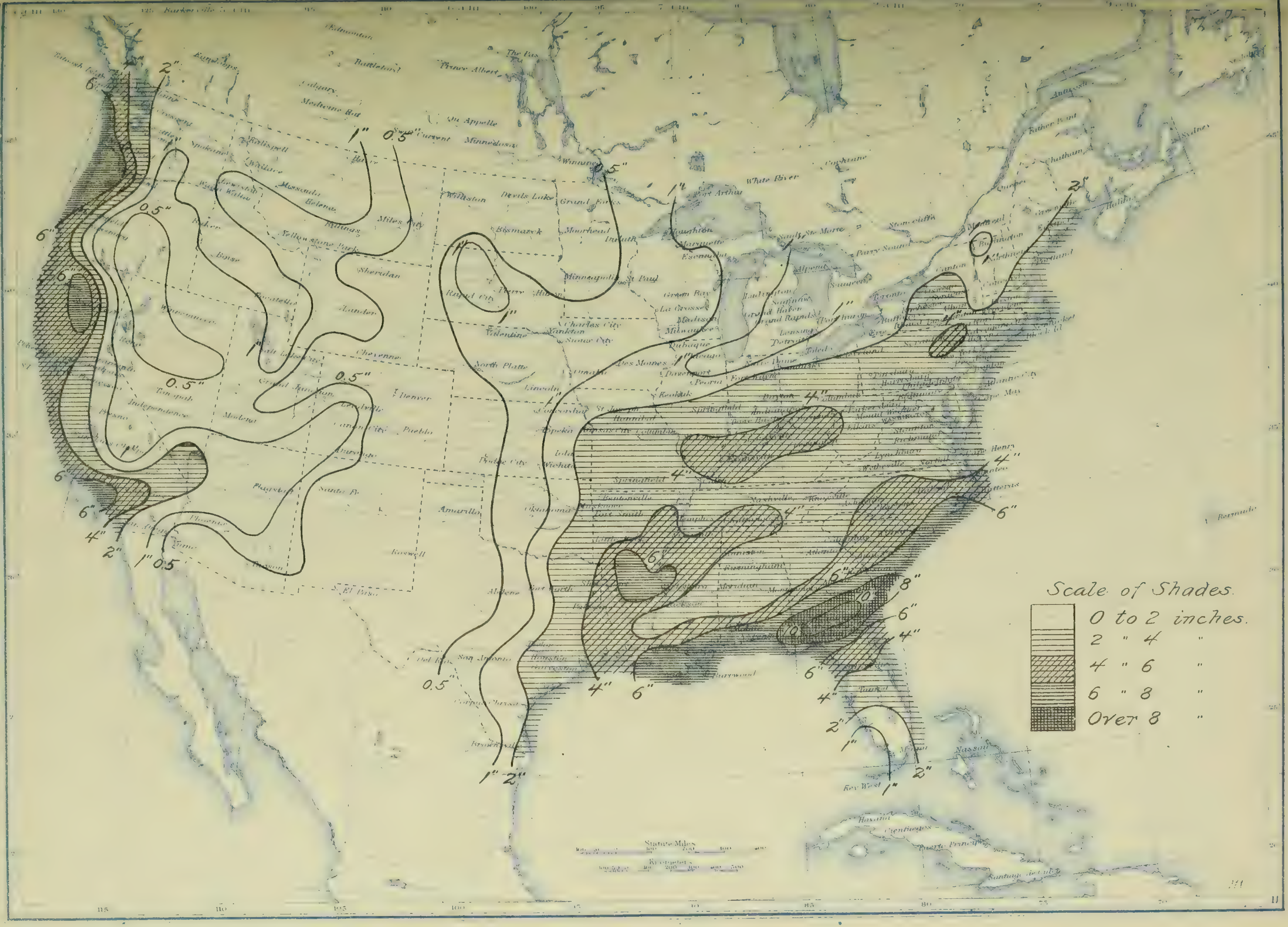
Stations.	Watershed.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Total.
Northeast Plain.																														
Boonville	Missouri						.23				T.			.24	T.				.12	.75				.04	.21	T.				1.62
Brunswick	Grand		.12				.10		T.		.04		T.	.48						.91			T.	.18	.10					2.23
Columbia	Missouri					.01	.09		T.	T.	.12	T.	.40	.50	T.	T.			.96	.03			.23	.17						2.51
Fayette	do						.18							.80					.41	.10			.15	.25						1.89
Fulton	do						.10				.10			1.00						.95				.50						2.65
Glasgow	do						.08	T.			T			.42	T.				.04	.62				.32	.24					1.72
Gorin	Mississippi		.10				.11						.20	.12					.30				.11							0.94
Hannibal	do		.06			T.	.26						.27	.26	T.	.01			.94	T.			.81	.33	T.				T.	2.94
Hermann	Missouri						.16	.02		T.	.10		.04	.52	.15		.01		.04	.94				.18	.12					2.28
Jefferson City	do						.15	T.			.12		T.	1.45	.05				.01	1.10				.20	.15					3.23
Keytesville	Chariton		.06				.10	.10	T.			.02	.40					.67						.50						1.85
Louisiana	Mississippi	.13					.20				.02				.80	.05			.05	.40				.25						1.90
Macon	Chariton	.05					.15						.16	.21		T.			.29	.30			.11	.70						1.97
Mexico	Mississippi			.02			.26	.03	T.	T.	.07		.10	.75	.15		.01		.02	1.08				.60	.35					3.44
Oakfield	Meramec						.48				.19		.05	1.29		.03			1.04	.57			T.	.37						4.02
Palmyra	Mississippi		.02				1.50						.50	.57	.06					.18				.97						3.80
St. Catherine	Grand		.21				.08						T.	.12		T.			.22		.02		T.	1.05						1.70
St. Charles	Missouri						.45				.20		.05	1.39		T.			1.10	.40										3.59
St. Louis (1)	Mississippi		T.	T.		.10	.35	T.	T.		.18	T.	.12	1.13		.02			1.61	.32			.29	.48					T	4.63
St. Louis (2)	do			T.		.02	.40	T.	T.		.22		.25	1.45		.08			1.30	.17			.02	.77					T	4.68
Ste. Genevieve	do		.07				.10	T.					.35	.20		T.			.50	.05			.50	.10						1.87
Sublett	do		.10				.40	.30				.40							T.		T.			.80						2.00
Unionville	Grand				T.		.24	T.					.10	.42			T.			T	T.	T.		.80	T.					1.56
Vandalia	Mississippi									T.				1.00					.35					.30						1.65
Warrenton	do						.22	.02		T.	.14		.07	.50	.04				.33	1.20				.34	.08					2.94
Southeast Lowlands.																														
Cape Girardeau	Mississippi			.02							.02		T.	.40	T.					2.80	.20			.55	.10					4.09
Cardwell	do			1.07		.05			.30			1.16	.35					.30	.72			.06	T.							4.01
Caruthersville	do		T.	.84	.22	T.	T.				.28		1.04	.10					.29	.93			.08	.90						4.68
Doniphan	Black				.20						.52		1.00	T.					1.27	.75			T.	.60						4.34
Jackson	Mississippi		.15	.11							.21		.60						2.80	.10			.60							4.57
Marble Hill	do		.90								.60		.30						.25	.75				.20	.30					3.30
New Madrid	do	T.		.17	.20	.07	.32				.40	.02	.15	1.00	.05				.05	1.56				1.50	.04					5.53
Cairo, Ill.	do		T.	.16	.08		.04				.19	T.	.40	.09		T.			1.84	.19			.18	.38						3.37
Ozark Plateau.																														
Arlington	Gasconade						.16	T.			.06		.04	.22	.08				.10	1.10				.12	.10					1.88
Bagnell	Osage										.05			1.20						.20					.10					1.55
Belle	Meramec						.20				.15			1.30					1.20	.53			T.	.30						3.68
Birchtree	Black										.17		.30	.17					.85	.58				.87						2.91
Bolivar	Osage						.10				.08	.30		.80					.70	.50			.20	.15	T					2.83
Cassville	White						.05						.20	.31					.62				T.							1.18
Crocker	Gasconade							T					T.		1.30					1.30				.10						2.70
Dean	Neosho						T.						.49	.20					.89											1.58
Duncan	Osage			T.			.05				.18		.25	.33					.66	.53			.05	.37	.01					2.43
Eldon	do						.17				.09		.19	1.60					.64	.28			.16	.06	T.					3.19
Fruit City	Black			.15							.15			.30					1.20	.58										2.38
Gano	Meramec						.20				.32		.46	.45					.72	.62		T.	.54	.06						3.37
Goodland	Black						.09				.15					.75				1.50					.65					3.14
Hollister	White			.46							.20		.30	.20					.60	.30				.20						2.26
Houston	Gasconade			1.34			T.				.10		.10	.50				.68	.76	.41		T.		.10						3.99
Ironton	Mississippi					T.	.07	T.			.30		.10	.58	.05				T.	1.60	T.			.65	.04					3.39
Koshkonong	Black		.12		.06						.18		.60	.05					1.57	.75			T.	.62						3.95
Lebanon	Osage						.26				.04		.30	.67					.77	.60			.13	.25	.02					3.04
Lockwood	do						.09						.42	.32						1.38			T.	.05						2.27
Mountain Grove	White			.07			T				.07		.12	.16					.52	.34			T.	.22	.12					1.62
Mount Vernon	Neosho						T.				T		T.	.50					1.19					.15						1.74
Neosho	do			.03			.16				T		.25	.40					.80	.30			T.	.10						1.98
Rolla	Meramec					.18		T.			.19		.12	1.77					.31	.81				.60						3.98
Springfield	White			T.		.20	.01				.10		.46	.26					1.02	.14			.06	.01						2.26
Wheatland	Osage						.20						.66	1.20					1.00	.90			.45	.20						4.63
Southwest Plateau.																														
Amoret	Osage					T.	.12				T.		.80	.30					.90	.18			.14	.23						2.67
Appleton City	do												.65	1.12					.60						.20					2.57
Clinton	do					.15							1.10						1.50	.40		.20		.20						3.55
Harrisonville	do						T.		.02		T.		.03	1.10					.07	.78				.32	.15					2.47
Joplin	Neosho			.10			.05				T.		.70	.60					.80	.50				.20						2.95
Lamar	do						T.	T.			.02		.23	.88	T.				.18	.99				.11	.09					2.50
Lamonte	Missouri									T.	.08		.31	.49	.10					.30			T	.42						1.70
Marshall	do			T			.05	T.	.01		.05		.20	.80		T.			.60	.20			.20	.60						2.71
Nevada	Osage						.02			T	.40		.40	.30				T.	.80	.40			.30	.05						2.67
Osceola	do																													
Warrensburg	Missouri						.07		.02	T.	.04		.58	.67					.57	.12	T		.08	.34						2.71
Warsaw	Osage			T			.11	T.			.17		.18	1.51					.59	.38			.30	.34						3.58
Northwest Plateau.																														
Avalon	Grand													.75						.25				.75						1.75
Bethany	do																													
Carrollton	Missouri		T				.05						T.	.30					T		.10		.50	.20						1.15
Grant City	Grand		T	T			T						.15	.15	T.						.10		.20	.20						0.80
Kansas City	Missouri			.01	T.	.03	.08		.02				T.	.40	.12	T.			.87	T	T.		.40	.47						2.40
Kidder	Grand		[illegible]						.35					.25					.35		.10		.70	.65						[illegible]
Lexington	Missouri						.05	.10					T.	.70					.10	.80		.01		.40	.11					2.27
Liberty	do						.10						.30	.40		T.		.67			T.		T.	.97						2.44
Maryville	do			T					.10				.10	.20	.10						.20		.02	.60	.20					1.42
Oregon	do		T	T			.05						T.	.19		T.			T		.04			.72						1.00
St. Joseph	do		.02	T		.02	.02						T.	.46	T.	T.			.18		.06		.16	.60						1.52
Tarkio	do																													
Trenton	Grand	T.	.02	T.			.22						T.	.31	T.	T.	T.		.39	T.	.03		.70	.02						1.69

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
T. Trace, less than 0.01 inch.

Daily temperatures for February, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Mean
Northeast Plain.																														
Brunswick §§	Maximum	51	57	33	36	37	25	16	25	45	37	21	20	25	24	40	37	54	35	34	32	46	34	17	28	35	43	49	50	35.2
	Minimum	25	35	28	19	18	20	−5	5	6	23	17	14	9	7	6	5	10	32	19	23	16	16	12	4	5	16	26	30	15.4
Columbia	Maximum	52	55	38	32	35	32	15	16	45	37	28	21	22	24	38	27	54	42	27	30	48	38	17	21	32	46	53	50	34.8
	Minimum	29	36	21	20	18	2	−3	7	15	24	17	14	10	11	7	5	26	25	19	17	18	16	11	5	6	21	34	27	16.4
Fayette	Maximum	49	53	35	32	32	28	10	13	41	34	21	19	19	24	35	23	49	37	26	27	43	35	14	23	29	43	49	50	32.9
	Minimum	27	35	19	18	15	−4	−8	3	8	22	17	10	7	7	5	2	20	23	16	15	2	12	9	2	3	15	32	29	12.9
Hannibal	Maximum	48	53	37	29	33	29	13	14	43	33	25	17	22	22	32	21	52	35	26	28	42	36	19	19	30	42	50	49	32.1
	Minimum	28	36	19	18	16	3	−4	4	16	19	14	11	9	6	9	3	20	25	18	18	12	13	10	4	−4	10	33	24	13.9
Jefferson City §§	Maximum	50	56	42	34	38	33	11	20	48	40	30	22	20	26	40	46	60	38	28	32	51	39	17	22	34	50	58	51	37.0
	Minimum	19	25	23	17	14	15	−4	4	7	14	20	15	7	7	7	3	3	33	17	17	12	15	9	1	1	6	24	27	12.5
Macon	Maximum	51	53	47	32	35	29	12	16	43	39	31	20	22	26	35	25	52	45	30	31	43	39	18	25	33	44	49	49	34.8
	Minimum	27	34	25	16	15	4	−7	2	6	19	12	11	8	6	6	2	18	27	16	21	15	15	10	0	1	13	30	30	13.6
Mexico §§	Maximum	51	56	36	30	34	27	15	16	46	36	25	20	20	29	35	35	52	32	28	28	45	35	17	24	34	45	54	50	34.1
	Minimum	22	28	27	17	14	15	−4	−4	5	11	20	13	9	6	5	1	1	33	17	7	12	15	10	1	0	1	28	30	12.1
Oakfield	Maximum	49	49	47	31	37	35	20	22	53	45	29	23	20	30	40	36	62	53	35	35	47	45	20	21	35	47	51	52	38.3
	Minimum	24	35	27	17	16	11	−1	10	14	23	15	16	10	9	11	4	22	33	21	19	15	20	11	2	3	16	32	32	16.7
St. Catherine	Maximum	47	52	50	32	32	33	11	13	38	37	30	18	21	25	35	33	49	45	30	31	40	40	16	24	28	39	45	50	33.7
	Minimum	25	34	25	14	16	5	−9	1	4	18	11	9	7	5	6	1	18	27	18	22	19	12	10	5	−1	13	31	28	13.0
St. Louis (1)	Maximum	45	49	45	31	39	40	20	21	50	40	30	23	21	28	38	26	62	50	32	33	42	43	16	22	30	44	51	51	36.5
	Minimum	29	34	25	19	20	8	1	13	17	24	17	17	12	13	13	7	22	31	23	22	20	16	13	7	10	20	32	29	18.4
Sublett	Maximum	46	50	32	30	28	16	31	32	36	36	34	12	20	23	33	34	40	34	48	33	39	32	23	40	29	38	44	47	33.6
	Minimum	22	28	22	14	14	9	−8	−7	3	10	7	5	9	1	−2	2	20	−3	21	20	17	3	3	3	21	20	22	21	10.2
Unionville §§	Maximum	48	52	30	34	31	22	16	10	36	30	18	12	18	22	32	26	56	29	38	36	38	25	16	30	31	38	50	52	31.3
	Minimum	24	30	26	10	12	14	−8	−9	−7	3	10	5	4	2	5	−2	1	25	17	12	20	23	8	−4	5	6	18	26	9.5
Warrenton §§	Maximum	48	53	41	30	34	32	16	20	49	35	25	22	19	25	37	41	61	33	30	31	47	36	15	22	35	36	54	49	34.9
	Minimum	22	23	33	18	15	15	−3	−3	8	15	15	14	10	6	7	1	2	31	19	18	14	16	11	2	2	0	16	31	12.9
Southeast Lowlands.																														
Cardwell	Maximum	62	63	62	55	50	46	43	37	52	43	40	32	34	33	44	44	68	62	60	47	55	60	56	29	36	48	75	63	50.0
	Minimum	26	25	28	28	28	30	10	14	20	26	36	28	23	19	20	24	30	50	35	28	28	40	24	14	19	20	40	35	26.7
Caruthersville	Maximum	54	64	57	50	37	45	42	39	51	47	50	39	33	38	42	39	70	60	56	52	54	60	52	33	38	49	59	65	49.1
	Minimum	26	36	45	30	29	36	11	12	22	35	28	31	20	18	20	22	28	48	35	29	30	41	27	14	19	19	31	34	27.7
Doniphan	Maximum	47	52	60	49	37	44	33	35	46	42	41	34	29	31	39	43	65	54	58	47	51	57	56	30	37	46	56	63	45.9
	Minimum	21	28	44	25	26	30	6	8	15	31	22	24	19	11	12	20	21	12	32	25	27	39	17	8	12	17	25	28	22.8
Jackson	Maximum	45	52	52	42	39	43	34	46	42	38	34	33	30	34	40	60	57	55	42	47	58	47	46	35	44	54	60	....	44.8a
	Minimum	20	34	38	22	26	30	12	18	31	26	23	13	10	19	24	20	41	28	25	34	39	15	10	6	15	29	34	....	23.9a
Marble Hill	Maximum	48	51	52	42	44	43	32	34	38	42	40	30	32	31	35	38	63	56	58	52	57	59	48	31	39	49	58	62	45.1
	Minimum	22	29	30	22	18	18	6	10	14	20	19	17	18	14	12	11	22	35	28	24	20	22	11	1	10	16	22	24	18.4
Ozark Plateau.																														
Birchtree	Maximum	46	49	56	38	38	39	22	35	45	40	45	32	26	32	42	44	67	57	51	42	52	56	46	27	49	41	....	61	43.6a
	Minimum	19	34	38	21	22	18	2	6	6	31	25	24	13	13	12	16	27	45	27	26	28	38	12	6	8	19	....	30	21.0a
Cassville	Maximum	51	57	53	41	36	37	21	39	48	48	57	52	33	31	49	54	64	56	45	50	60	55	55	29	42	56	58	59	47.7
	Minimum	20	35	35	21	33	4	0	7	4	32	21	31	14	17	12	26	29	44	26	26	24	46	14	8	14	17	30	25	22.0
Duncan	Maximum	46	49	50	33	37	36	15	33	44	40	44	38	29	30	42	41	62	52	40	39	55	53	47	24	37	57	54	55	42.4
	Minimum	17	35	29	19	27	10	−2	5	12	31	22	27	11	13	7	13	29	38	23	24	24	35	11	3	5	17	30	29	19.4
Eldon	Maximum	52	56	48	41	42	36	12	23	49	39	36	27	22	27	41	38	60	48	34	33	57	48	26	26	36	52	57	52	39.9
	Minimum	25	37	26	19	19	5	−2	9	12	26	26	19	9	10	10	3	20	31	19	18	18	25	12	4	5	20	35	29	17.5
Fruit City	Maximum	47	48	50	38	41	40	22	33	47	39	35	30	25	31	42	43	66	57	52	41	52	50	38	24	49	48	57	59	43.0
	Minimum	34	38	25	27	25	8	3	7	19	22	18	25	4	13	20	15	29	45	28	25	24	28	12	12	19	10	35	32	21.5
Gano	Maximum	49	49	47	34	44	37	18	29	48	40	36	30	32	28	44	38	63	52	36	35	52	51	32	23	32	51	59	53	40.8
	Minimum	21	36	32	12	19	13	0	7	14	31	25	22	11	11	15	7	27	35	22	20	13	32	11	4	3	11	32	31	18.5
Hollister	Maximum	52	48	60	38	42	34	16	18	50	50	52	36	32	34	50	48	64	58	38	52	44	64	34	34	45	58	64	62	45.6
	Minimum	28	34	38	20	32	14	4	8	10	30	34	32	18	16	18	24	28	38	30	32	30	34	20	10	12	18	28	30	23.9
Ironton§§	Maximum	49	50	47	29	40	42	23	33	49	41	34	26	20	33	43	35	65	51	38	42	52	54	19	23	36	48	58	61	40.8
	Minimum	17	29	33	19	21	33	3	7	12	31	22	21	17	11	18	9	25	40	27	22	19	34	16	5	5	10	30	27	20.1
Lebanon	Maximum	48	51	45	45	37	38	32	34	48	47	39	36	28	34	42	39	63	54	39	41	56	41	38	28	45	52	57	57	43.4
	Minimum	18	41	30	18	32	9	−2	9	19	33	24	24	10	10	11	9	30	32	22	22	24	36	11	0	5	22	37	32	20.3
Mountain Grove	Maximum	41	54	46	35	34	34	20	35	46	46	41	35	24	30	49	42	64	55	51	43	55	52	47	25	34	43	56	54	42.5
	Minimum	18	34	33	17	25	10	−5	4	18	30	25	24	9	9	7	10	24	43	27	23	26	37	8	0	4	24	31	30	19.5
Neosho	Maximum	54	59	55	39	38	39	20	37	49	47	60	55	36	32	49	54	67	63	40	47	61	57	56	28	42	57	54	56	48.2
	Minimum	23	39	31	19	27	9	0	6	18	33	25	35	13	18	10	26	35	39	27	27	25	49	16	9	14	20	38	26	23.5
Rolla	Maximum	48	48	49	36	43	38	30	22	43	43	36	33	16	23	36	42	61	48	49	37	43	53	43	25	30	44	53	59	40.4
	Minimum	23	36	28	19	28	28	−2	8	14	30	27	19	10	11	14	5	25	45	31	20	18	36	12	2	4	16	33	29	20.3
Springfield	Maximum	46	53	46	31	37	35	14	30	42	42	47	33	23	26	42	37	62	53	32	42	57	33	38	24	36	51	53	53	40.6
	Minimum	27	38	25	21	29	0	−2	10	23	31	30	23	9	15	10	16	33	31	24	27	30	36	12	6	14	25	37	33	21.9
Southwest Plain.																														
Amoret	Maximum	51	60	51	41	42	39	20	24	45	41	41	36	24	29	42	42	56	51	34	36	49	48	36	23	34	47	47	50	40.8
	Minimum	28	36	27	21	24	3	−3	7	18	28	26	20	10	12	2	10	24	31	22	24	20	27	11	6	6	21	32	22	18.4
Clinton	Maximum	65	60	49	41	42	38	19	23	46	45	37	36	27	28	40	42	65	60	36	35	40	38	31	25	34	50	47	53	41.1
	Minimum	35	35	30	21	25	7	1	10	15	30	27	22	2	14	16	10	20	31	20	22	19	16	13	5	9	20	30	31	19.1
Harrisonville§§	Maximum	50	57	42	37	37	18	17	23	45	42	31	23	20	27	32	44	53	37	28	33	41	36	16	20	31	46	43	51	35.0
	Minimum	27	29	30	22	21	22	−3	−3	6	23	28	21	10	10	3	9	12	34	23	22	23	23	12	7	7	8	23	30	17.1
Lamar§§	Maximum	53	59	39	38	38	27	21	34	47	42	53	37	24	30	42	46	63	53	37	39	58	52	19	25	40	55	52	51	41.9
	Minimum	22	38	34	23	23	25	0	0	18	25	29	32	11	11	8	11	19	46	25	24	25	29	15	12	9	17	30	30	21.1
Lamonte	Maximum	50	56	46	37	37	34	16	22	45	40	36	19	20	25	39	37	48	39	32	31	44	38	23	23	34	47	45	50	36.2
	Minimum	26	35	21	20	19	3	−3	6	10	20	19	17	9	9	2	3	25	31	19	22	14	22	13	2	−1	13	32	30	15.6
Marshall	Maximum	51	55	48	31	36	33	14	17	43	39	31	25	21	24	33	32	51	43	31	31	45	44	21	24	32	43	47	49	35.6
	Minimum	27	34	27	19	18	3	4	5	9	33	20	15	9	9	3	5	19	30	19	22	13	20	11	3	5	16	33	30	16.2
Warrensburg	Maximum	53	58	47	35	35	34	18	20	47	41	34	26	21	21	40	29	53	45	32	31	44	39	25	20	34	50	45	51	36.7
	Minimum	30	37	25	20	20	4	−3	7	10	27	25	17	9	13	9	7	25	30	21	23	17	25	11	3	5	22	37	30	18.1
Warsaw	Maximum	47	61	61	42	43	40	18	25	52	43	42	33	26	28	43	40	65	48	33	36	57	55	31	26	38	54	55	55	42.8
	Minimum	23	38	22	20	25	10	0	9	11	32	25	23	10	15	11	4	18	33	20	24	19	31	14	1	6	16	30	34	18.9
Northwest Plateau.																														
[illegible]	Maximum	48	55	48	36	37	33	13	17	13	39	36	33	22	24	48	34	54	50	33	31	42	40	16	29	31	41	16	46	36.6
	Minimum	28	24	23	16	18	1	7	2	8	21	11	12	8	4	4	4	19	29	21	23	22	15	11	−4	0	13	30	30	14.0
Grant City	Maximum	33	52	45	38	31	28	14	15	37	37	33	13	16	19	38	29	52	39	26	38	37	36	16	22	33	38	45	48	32.4
	Minimum	24	26	14	13	17	3	10	6	6	12	10	4	7	6	6	4	18	26	12	21	22	16	5	0	0	16	27	28	11.5
Kansas City	Maximum	48	56	42	36	35	29	17	20	47	43	32	22	21	27	44	34	56	42	27	34	40	38	14	22	33	44	45	51	35.7
	Minimum	31	38	21	19	20	2	1	5	13	26	20	13	9	13	13	13	31	27	20	24	26	13	10	1	10	25	32	27	18.0
[illegible]	Maximum	50	52	29	31	35	12	14	22	43	35	21	15	20	21	39	37	53	30	28	30	37	28	13	26	32	40	40	43	31.4
	Minimum	30	37	21	17	18	7	8	1	19	21	15	9	8	5	9	7	35	30	18	23	26	28	9	−5	2	22	26	36	16.6
Lexington §§	Maximum	49	54	32	35	36	26	17	20	44	38	27	19	23	26	42	27	53	33	32	31	41	35	13	25	32	42	45	56	33.8
	Minimum	31	35	27	19	19	25	7	5	12	16	21	11	9	10	7	10	23	22	22	24	22	19	12	3	3	20	31	31	17.4
Maryville §§	Maximum	50	52	21	35	30	2	15	15	40	35	15	11	19	22	40	34	51	30	30	35	39	20	15	22	33	40	41	48	30.3
	Minimum	26	32	18	12	15	2	−11	−11	−6	7	12	5	5	6	6	6	6	28	8	8	21	18	6	−4	−1	3	21	27	9.4
Oregon	Maximum	38	47	40	35	31	32	18	18	42	38	32	19	19	23	43	35	53	41	30	31	40	38	19	22	50	41	39	47	35.1
	Minimum	28	35	16	15	18	1	−8	−1	10	18	11	7	8	5	10	10	29	27	15	23	26	10	6	−3	4	23	25	30	14.2
St. Joseph	Maximum	51	53	37	36	36	27	19	18	46	40	30	16	19	22	43	34	54	36	29	34	39	37	14	21	33	41	40	46	34.0
	Minimum	30	35	17	15	19	1	7	2	12	21	16	10	9	7	11	11	31	26	17	25	26	10	7	2	3	25	27	27	15.3
[illegible]	Maximum	45	41	30	30	33	31	12	12	35	34	31	18	20	18	37	29	16	44	28	32	41	39	16	20	28	59	42	45	32.4
	Minimum	25	32	20	17	20	3	7	1	7	19	13	8	8	6	7	5	18	26	17	22	25	13	10	3	2	24	30	28	14.0

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is entered to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 " 4 "
4 " 6 "
6 " 8 "
Over 8 "
0.5"
1"
2"
4"
6"
8"
10"
Statute Miles
Kilometers
Edmonton
Battleford
Prince Albert
The Pas
Calgary
Medicine Hat
Qu Appelle
Swift Current
Minnedosa
Winnipeg
White River
Cochrane
Port Arthur
Kamloops
Spokane
Kalispell
Havre
Walla Walla
Helena
Billings
Miles City
Williston
Devils Lake
Grand Forks
Bismarck
Moorhead
Duluth
Marquette
Escanaba
Sault Ste Marie
Parry Sound
Quebec
Montreal
Chatham
Halifax
Sydney
Father Point
Boise
Yellowstone Park
Sheridan
Lander
Pocatello
Rapid City
Pierre
Huron
Minneapolis
St Paul
Green Bay
La Crosse
Madison
Milwaukee
Grand Haven
Grand Rapids
Lansing
Detroit
Port Huron
Toronto
Buffalo
Erie
Canton
Northfield
Portland
Albany
Boston
Nantucket
Block Isd
Salt Lake City
Cheyenne
North Platte
Valentine
Yankton
Sioux City
Charles City
Dubuque
Chicago
Davenport
Des Moines
Omaha
Lincoln
Peoria
Fort Wayne
Toledo
Cleveland
Pittsburg
Harrisburg
Philadelphia
Atlantic City
Cape May
Washington
Baltimore
Grand Junction
Denver
Pueblo
Durango
Independence
Modena
Tonopah
Fresno
Winnemucca
Reno
Flagstaff
Santa Fe
Phoenix
Yuma
Tucson
Amarillo
Dodge City
Wichita
Topeka
Kansas City
Concordia
St Joseph
Hannibal
Columbia
Keokuk
Springfield
Indianapolis
Terre Haute
Dayton
Columbus
Parkersburg
Elkins
Lynchburg
Richmond
Norfolk
Cape Henry
Wytheville
Hatteras
Nashville
Knoxville
Springfield
Bentonville
Fort Smith
Oklahoma
Memphis
Little Rock
Chattanooga
Atlanta
Birmingham
Meridian
Jackson
Shreveport
Montgomery
Abilene
Fort Worth
Roswell
El Paso
Del Rio
San Antonio
Houston
Galveston
Corpus Christi
Brownsville
Burrwood
Tampa
Jupiter
Key West
Nassau
Havana
Cienfuegos
Puerto Principe
Santiago de Cuba
Bermuda
115
110
105
100
95
90
85
80
75
70

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

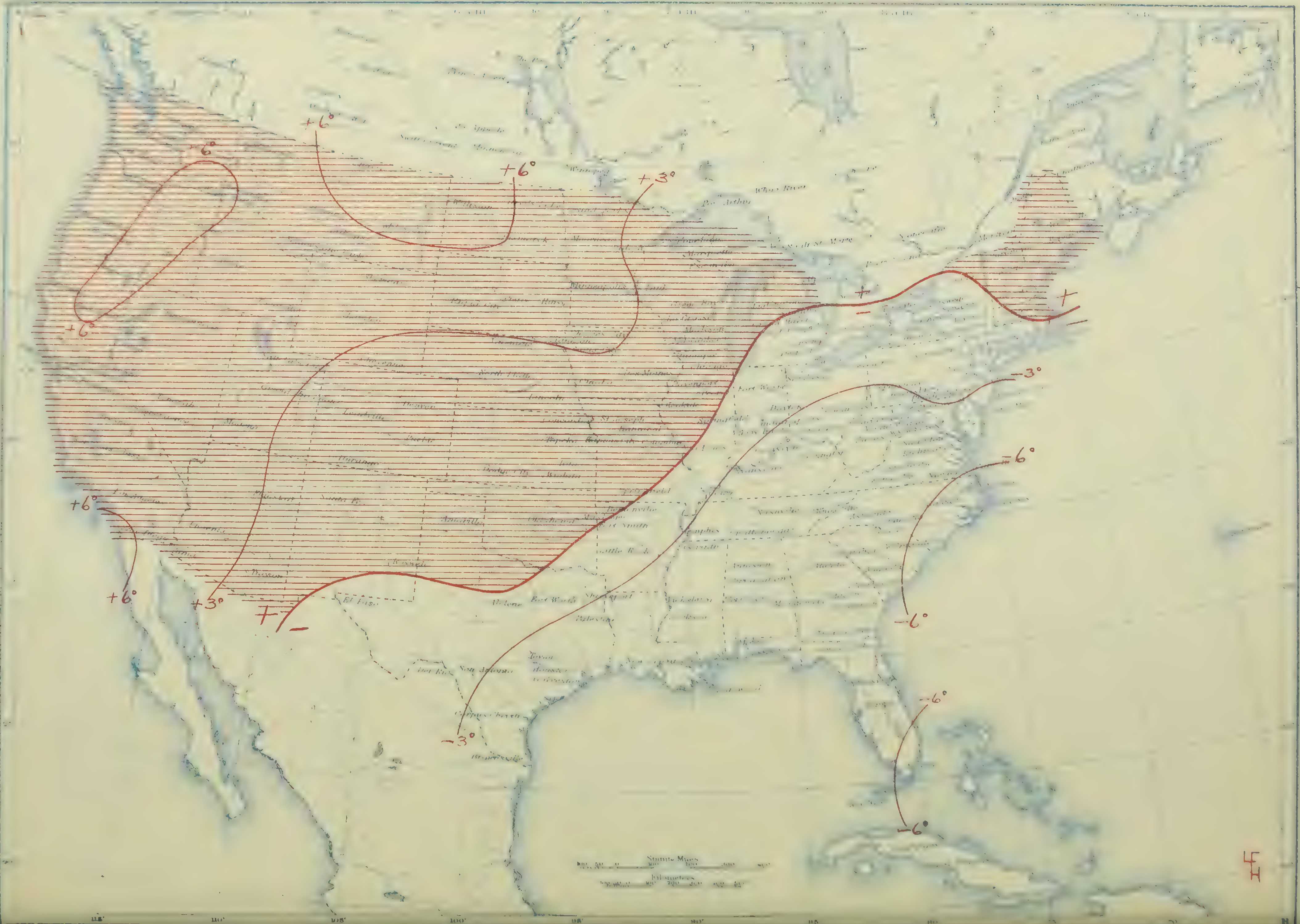
MARCH, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

1862 1889

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, March, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

L. XVIII. COLUMBIA, MO., MARCH, 1914. No. 3

GENERAL SUMMARY.

The weather of the month did not differ much from normal arch conditions. The first 10 or 12 days and the third week re cold and blustery, and the latter half of the month was wet, t, on the other hand, there were several days quite favorable some outdoor occupations. There was no severe cold or high nd storm. The last week was warm and spring-like, with quent thunderstorm showers, the first of the season occurring the 26th.

PRESSURE.

The mean sea-level atmospheric pressure for the Section, 8 sta-ons reporting, was 30.10 inches, or 0.07 inch higher than nor-al. The highest pressure was 30.55 inches, at St. Joseph on e 24th, and the lowest was 29.55 inches, which also occurred at . Joseph, on the 22d. The greatest local range was 0.98 inch, St. Joseph.

TEMPERATURE.

The monthly mean for the Section, as a whole, 68 stations porting, was 43.2 degrees, which is 1.3 degrees lower than nor-al. From the 1st to the 12th, inclusive, temperatures were most continuously below normal, as also was the case from the th to the 23d; during the former period the 1st, 2d and 4th re the coldest days, but as a rule temperatures were not lower an 10 degrees above zero; during the latter period, however, ey were somewhat lower, and reached zero at one or two sta-ons on the 19-20th. The mild periods, with quite marked tem-rature excess, occurred from the 13th to the 17th, and the last ven days; during both periods the day temperatures reached or ceeded 80 degrees.

The cold, as well as the warmth, was irregularly distributed in e Section; the largest temperature deficiency occurred in the zark plateau and southeast lowlands, owing perhaps to the avier snowfall, while in the northwest plateau, where the ows were not so deep, there was a slight temperature excess. he monthly averages and departures for the five districts were follows: northeast plain, 41.1 degrees, deficiency, 1.2 degrees; utheast lowlands, 45.5 degrees, deficiency, 3.6 degrees; Ozark lateau, 45.0 degrees, deficiency, 2.1 degrees; southwest plain, .2 degrees, normal; northwest plateau, 40.7 degrees, excess, 2 degree.

The average number of days with temperature 32 degrees or wer was 19 in the northeast plain; 16, southeast lowlands; 18, zark plateau; 18, southwest plain; 18, northwest plateau; and for the Section as a whole.

HUMIDITY.

At Columbia the average relative humidity, 7 a.m., was 83 per nt; at Hannibal, 80 per cent; at Kansas City and Springfield e average of the 7 a.m. and 7 p.m. readings, was 70 and 66 r cent, respectively.

PRECIPITATION.

The precipitation was not evenly distributed geographically, lthough the total received in each division was sufficient for resent needs. In the southwest plain and in the western part f the northwest plateau precipitation exceeded the normal, the tal monthly falls ranged from 3 to over 4 inches; in the eastern alf of the Section, including the Osage, Gasconade, Meramec, he lower half of the Missouri, and the Mississippi watersheds, onthly amounts were generally less than 2 inches. There was nsiderable cloudiness during the first half of the month, with numerous snow flurries, but as a rule the precipitation was light, being practically inappreciable at many stations; beginning with the 17th, though, precipitation occurred daily to the close of the month, save on the 22d, 23d and 24th.

The average precipitation for the Section, as determined from the records of 79 stations, was 2.75 inches, which is about 0.41 inch below normal. The average for each division and the departure from normal was as follows: northeast plain, 2.30 inches, a deficiency of 0.17 inch; southeast lowlands, 3.16 inches, a deficiency of 1.28 inches; Ozark plateau, 2.67 inches, a deficiency of 1.09 inches; southwest plain, 2.99 inches, an excess of 0.15 inch, and northwest plateau, 3.41 inches, an excess of 1.21 inches.

The average snowfall for the Section, as a whole, was 4.7 inches, which is below normal. As mentioned elsewhere, snow flurries were frequent during the first two weeks, but, except locally, they were unimportant. Most of the snow fell during one storm, on the 19th; in the southeast lowlands and in parts of the Ozark hills, 6 to 8 inches fell within the 24 hours. The greatest local monthly fall was 10.7 inches, at Duncan. The average for each division was as follows: northeast plain, 4.1 inches; southeast lowlands, 5.5 inches; Ozark plateau, 5.5 inches; southwest plain, 3.7 inches, and northwest plateau, 4.7 inches.

The average number of days with 0.01 inch precipitation was 8.

WINDS.

The prevailing winds were from the northwest, The highest velocity was 46 miles an hour, from the northwest, at Kansas City on the 17th, and 46 miles from the south, at St. Louis, on the 26th. The average hourly velocity at stations equipped with anemometers was as follows: Columbia, 9.3 miles; Hannibal, 9.8 miles; St. Louis, 13.0 miles; Springfield, 10.9 miles; Kansas City, 13.3 miles; and St. Joseph, 10.0 miles. Cairo, Ill., 10.0 miles, and Keokuk, Ia., 8.3 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 57, or about 2 per cent below normal. At St. Louis the percentage of possible was 61; at Springfield, 49; at Kansas City, 63, and at St. Joseph, 59. For the Section, the average number of clear days was 13, partly cloudy days, 7, and cloudy days, 11.

COMPARATIVE DATA FOR MARCH

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	38.5	−4.8	90	1	4.02	+1.11	......	10
1889	44.3	+1.0	84	13	1.98	−0.93	......	5
1890	37.3	−6.0	76	−11	2.61	−0.30	......	8
1891	36.6	−6.7	78	−11	3.01	+0.10	......	10
1892	38.9	−4.4	87	5	3.11	+0.20	......	8
1893	40.5	−2.8	86	1	2.86	−0.05	2.15	7
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	6
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	9
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	8
1897	44.2	+0.9	93	− 5	6.07	+3.16	4.10	12
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	11
1899	37.4	−4.1	78	− 8	2.93	+0.02	4.30	6
1900	40.4	−1.9	88	− 4	1.48	−1.43	3.41	6
1901	42.7	−0.6	85	− 1	3.74	+0.83	3.21	8
1902	45.3	+2.0	85	1	3.49	+0.58	5.50	9
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	8
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	9
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	8
1906	34.6	−8.7	75	− 5	3.93	+1.02	3.00	11
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	7
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	7
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	6
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	2
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	6
1912	35.2	−8.1	89	− 4	4.62	+1.71	2.85	11
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	9
1914	43.2	−1.3	87	− 2	2.75	−0.41	3.01	8

Climatological data for March, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	38	......	......	......	......	......	......	....	1.77	−1.37	0.53	8.5	10	14	1	16	nw.	C. Randecker.
Brunswick	Chariton	652	35	42.0	+0.3	79	15	13	20	47	3.11	+0.68	1.25	4.8	8	13	4	14	nw.	Louis Benecke.
Columbia	Boone	784	25	41.6	+0.2	79	15	8	20	37	3.36	+0.33	2.04	5.5	12	9	4	18	n.	U. S. Weather Bureau.
Fayette	Howard	725	30	39.8	−2.7	76	15	9	20	36	2.47	−0.21	0.97	5.3	10	15	3	13	......	Prof. T. B. Smith.
Fulton	Callaway	818	23	43.4	−1.7	80	15	8	20	47	1.68	−1.22	0.55	4.5	7	15^{a}	2^{a}	13^{a}	n.	Russell Johnston.
Glasgow	Howard	618	36	......	......	......	......	......	......	....	2.78	+0.25	1.88	4.0	7	15	2	14	n.	J. J. Shaughnessy.
Gorin	Scotland	700	28	......	......	......	......	......	......	....	1.11	−1.45	0.65	0.4	7	5	11	15	nw.	J. W. Pulliam.
Hannibal	Marion	534	22	40.6	−1.0	76	26	10	1	37	1.58	−1.18	0.62	2.7	14	11	7	13	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	40	......	......	......	......	......	......	....	0.91	−2.21	0.30	6.0	11	13	1	17	e.	C. T. Maushund.
Jefferson City	Cole	628	30	40.6	−2.9	80	15	9	20	51	1.85	−1.26	0.66	5.7	10	17	1	13	n.	Miss Emma Swift.
Keytesville	Chariton	...	1	......	......	......	......	......	......	....	3.33	......	0.76	5.0	8	....	....	....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	37	40.8	−1.8	75	14†	−2	4	47	4.07	+1.48	1.35	5.0	12	18	4	9	n.	J. T. Farrell.
Macon	Macon	881	2	40.7	......	75	15	11	1	36	5.80	......	1.41	1.0	8	12	5	14	sw.	John A. Cook.
Mexico	Audrain	797	37	39.0	−3.3	78	15	9	1†	47	1.87	−0.78	0.40	6.5	11	14	2	15	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	43.8	−1.9	80	15	13	2†	36	1.80	−1.90	0.50	7.5	10	7	11	13	n.	E. E. Steines.
Palmyra	Marion	652	2	39.2	......	75	27	11	20	36	2.94	......	1.18	1.4	9	11	9	11	sw.	W. B. Markell.
St. Catherine	Linn	914	1	40.6	......	75	15	12	1	36	2.51	......	0.74	1.8	9	10	12	9	nw.	L. D. Baker.
St. Charles	St. Charles	614	37	43.8	−0.2	80	15	13	2†	42	2.55	+0.30	0.98	6.0	8	11	5	15	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	43.5	0	80	15	16	1	33	1.25	−2.18	0.31	5.2	12	12	10	9	nw.	U. S. Weather Bureau.
St. Louis(2)	do.	578	3	42.7	......	80	15	15	1	34	1.35	......	0.28	5.0	15	12	5	14	se.	St. Louis University.
Steffenville	Lewis	576	22	41.1	−0.7	76	16	10	1	40	2.99	+0.10	1.60	0.5	9	12	7	12	nw.	Frank Hall.
Sublett ‡‡	Adair	1,000	35	39.1	−0.1	74	15	9	1	37	2.50	−0.21	2.00	T.	2	7^{a}	8^{a}	15^{a}	w.	Lewis Spriggs.
Unionville	Putnam	1,072	22	36.8	−1,0	75	15	6	2	42	1.83	−0.45	0.90	2.5	7	13	5	13	n.	Geo. W. Davis.
Vandalia	Audrain	796	4	42.0	......	74	26	10	4	33	0.96	......	0.25	2.5	4	16	4	11	n.	C. B. Ellis.
Warrenton	Warren	865	25	41.3	−0.7	80	15	13	2	42	1.20	−2.20	0.31	4.0	13	8	7	16	nw.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	9	......	......	......	......	......	......	....	1.79	......	0.70	3.0	10	18	4	9	s.	D. L. Albert.
Cardwell	Dunklin	...	3	47.8	......	78	14	16	19	43	4.01	......	1.66	8.0	7	15	8	8	s.	E. M. Perry.
Caruthersville	Pemiscott	...	23	47.4	−3.9	81	15	19	2	40	3.42	−0.52	0.80	8.0	8	13	1	17	w.	H. E. Averill.
Doniphan	Ripley	440	16	45.2	−4.8	75	15	9	20	40	3.48	−0.44	1.21	4.0	9	15	3	13	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	24	45.2	−2.2	77	15	15	20	40	2.97	−1.85	1.15	8.0	8	9	6	16	n.	L. M. Dean.
Marble Hill	Bollinger	420	23	42.6	−4.9	78	15	8	20	46	3.75	−1.42	1.60	3.5	5	16	13	2	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	...	......	......	......	......	......	....	2.96	2.76	0.90	6.0	13	13	0	18	se.	Miss Josie Smith.
Cairo, Ill.	Alexander, Ill	359	43	44.6	−2.4	76	15	18	2	28	3.31	−0.71	1.16	3.5	12	7	6	18	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	24	......	......	......	......	......	......	....	1.39	−1.62	0.68	10.5	7	16	4	11	se.	G. V. Randolph.
Bagnell	Miller	594	18	......	......	......	......	......	......	....	.....			3.0	....	15	1	15	ne.	C. O. Brockmann.
Belle	Maries	1,000	23	48.2^{m}	+3.1	86	29	......	......	36	2.15	1.13	0.70	5.5	7	...	...	...	n.	A. J. Wolford.
Birchtree	Shannon	1,200	21	44.6	−3.2	79	15	9	20	41	2.36	2.71	0.68	3.5	6	14	7	10	s.	A. H. Kirkendall.
Bolivar	Polk	1,020	27	46.8	+0.3	81	15	4	20	41	3.29	+0.28	1.10	5.0	8	13	13	5	sw.	T. H. B. Dunnegan.
Cassville	Barry	1,500	4	44.4	......	80	27	10	20	46	3.75		1.60	4.5	9	21	5	5	s.	Mrs. Zuma Bloome.
Crocker	Pulaski	1,300	3	45.4^{b}	...	...	...	......	......	....	1.38	...	0.73	6.0	6				s.	Roy W. Reed.
Dean‡‡	McDonald	1,000	16	45.9^{d}	−3.7	80	15†	12	12	47	2.76	0.87	1.41	3.0	5	16^{d}	1^{d}	10^{d}	....	H. E. Dean.
Duncan	Webster	...	1	44.0	....	79	15	9	20	40	2.10	.....	0.67	10.7	13	12	7	12	s.	C. A. Mingus.
Eldon	Miller	934	2	44.2	...	79	15	11	20	42	2.37	.....	0.89	6.2	12	8	21	2	nw.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	1	44.6	....	79	15	12	1	36	2.62	..	0.70	3.0	7	13	11	7	w.	R. C. Walton.
Gano ‡‡	Dent	...	11	44.8	−3.1	83	15	9	20	41	1.83	−2.45	0.60	6.3	8	13	9	9	nw.	A. C. Leach.
Goodland	Iron	1,000	10	42.0	−4.1	80	15	2	20	51	2.23	−1.89	0.83	5.0	6	17	3	11	n.	F. M. Adams.
Hollister	Taney	1,000	5	46.4	...	84	15	16	12	46	4.00	...	1.75	6.5	8	21	0	10	sw.	W. P. Chapmann.
Houston	Texas	1,280	22	41.0	5.8	80	15	10	21	45	2.11	−2.55	0.63	5.0	7	15	2	14	s.	R. F. Harrison.
Ironton	Iron	925	37	42.6	−2.5	80	15	0	20	49	2.31	−2.09	0.55	6.0	11	9	7	15	s.	W. H. Delano.
Koshkonong	Oregon	911	14	46.1	−4.2	80	15	14	20	37	3.25	−0.92	0.65	6.5	9	13	6	12	ne.	J. W. Hitt.
Lebanon	Laclede	1,265	26	46.4	+0.3	82	14	10	20	46	2.70	−1.10	1.06	3.0	11	16	7	8	s.	G. L. Weissgerber.
Lockwood	Dade	1,088	19	46.4	......	78	15†	8	20	56	3.39	1.16	1.24	6.0	6	16	7	8	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	44.4	2.7	79	15	14	2†	40	2.13	−2.25	0.57	4.0	8	11	9	11	nw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	33	45.1	−1.0	78	14†	14	20	38	3.12	−0.57	1.69	3.5	4	13	10	8	se.	J. R. White & Son.
Neosho	Newton	1,083	32	47.6	0.8	80	15	15	12	40	4.08	+0.64	2.93	3.2	7	18	5	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	33	44.1	0.8	80	15	7	20	38	4.64	+0.52	1.23	9.0	6	17	9	5	sw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	44.0	+0.5	77	15	17	20	33	3.37	−0.70	1.39	4.4	15	12	8	11	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	21	......	......	......	......	......	......	....	[illegible]	−1.52	1.00	8.0	5	10	9	12	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	46.2	......	82	16	12	20	43	4.02	......	1.40	1.2	7	12	8	11	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	......	......	78	16	10	20	....	1.80	−1.28	1.00	1.0	6	5	16	10	n.	Mark Brown.
Clinton	Henry	800	27	46.2	....	80	15	10	1†	42	3.55	+0.98	1.25	6.0	5	7	21	3	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	41	42.5	+2.0	83	15	12	20†	47	4.24	+1.70	1.52	5.0	9	11	6	14	nw.	A. J. Sharp.
Joplin	Jasper	975	37	50.4	−0.3	87	15	19	20	36	2.55	−0.22	0.60	1.0	6	18	3	10	s.	Joplin High School.
Lamar	Barton	964	34	45.4	−1.3	82	15	13	20	41	2.27	−0.57	0.78	3.5	5	13	9	9	s.	E. H. Adams.
Lamonte	Pettis	863	26	43.2	......	77	15†	12	20	38	3.28	+0.82	1.10	2.0	7	13	11	7	sw.	J. Ed. Hall.
Marshall	Saline	779	24	42.4	0	76	15	8	20	47	3.78	+1.20	1.25	7.7	11	11	13	7	sw.	Prof. W. H. Black.
Nevada	Vernon	800	21	......	......	......	......	......	......	....	2.16	−0.91	0.72	2.5	6	7^{d}	16^{d}	4^{d}	sw.	C. Jewell.
Osceola	St. Clair	738	...	......	......	......	......	......	......	....	.....	......	......	......	...	...	...	...	.....	W. E. Matthews.
Warrensburg	Johnson	883	36	44.4	+1.1	80	15	13	20	36	3.44	+1.05	1.06	4.8	13	10	10	11	ne.	Geo. H. Collins.
Warsaw	Benton	883	11	45.8	−1.6	85	15	8	20	46	2.10	−1.03	0.56	6.0	7	14	12	5	ne.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	...	30	41.8	−0.1	79	15	13	20	41	3.75	+1.20	0.90	4.0	7	15	11	5	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	...	......	......	......	......	......	......	....	.....	......	......	......	...	...	...	...	.....	W. H. Skinner.
Conception	Nodaway	982	29	38.6	−0.4	77	15	8	20	37	3.46	+1.82	0.76	4.0	9	12	11	8	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	21	39.0	−1.7	77	15	10	1	38	3.06	+0.98	0.89	2.0	8	11	8	12	nw.	W. H. Campbell.
Kansas City	Jackson	963	26	43.2	+2.4	82	15	16	22	36	3.02	+0.20	1.21	5.1	10	11	10	10	n.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	21	40.0	−0.8	77	15	8	20	34	1.48	−0.85	0.77	6.0	4	14	8	9	ne.	J. F. Sharp.
Lexington	Lafayette	813	33	42.4	0.7	79	15	13	20	39	4.68	+1.94	2.08	5.0	8	18	0	13	n.	J. W. Keithley.
Liberty	Clay	861	26	44.8	+2.3	84	15	8	20	46	3.70	+1.34	1.65	7.0	6	14^{a}	8^{a}	8^{a}	nw.	W. C. Wilmott.
Maryville	Nodaway	1,160	24	37.2	+0.1	77	15	8	20†	46	3.46	+1.52	1.20	3.5	8	17	7	7	nw.	J. R. Brink.
Oregon	Holt	1,113	59	39.6	+0.8	77	15	6	21	34	3.30	+1.21	0.95	7.0	9	15	5	11	nw.	Tom Curry.
St. Joseph	Buchanan	825	13	40.6	......	78	15	10	20	34	4.69	+2.68	3.01	6.4	8	12	6	13	nw.	U. S. Weather Bureau.
Tarkio	Atchison	...	...	......	......	......	......	......	......	....	.....	......	......	......	...	...	...	...		Prof. M. H. Rees.
Trenton	Grundy	812	20	40.4	0.1	72	15	12	1	32	3.47	+1.27	1.14	2.0	14	12	5	14	ne.	W. H. Estes.

Interpolated and incomplete data are not considered in means.

All other records are used in determining section or division means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations.

Reference letters a, b, c appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on earlier date or dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. ; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for March, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
Boonville ‖	Missouri			T.	.16		T.	.04	.03										T.	.33	.07					.14			.04	.53	.08	.35	1.77
Brunswick ‖	Grand						T.	.03	T.									T.		.37	T.		T.			.04		.12	.30	1.25	.75	.25	3.11
Columbia	Missouri			.14		T.	T.	.04				T.						.03	.17	.21		.01				.15	.08		.12	.32	.05	2.04	3.36
Fayette	do			.06				.03										.05		.31		T.				.12	.07		.10	.66	.10	.97	2.47
Fulton	do			.10				.05												.30								.55	.20	.40	.08		1.68
Glasgow ‖	do				.02			T.	.04											.42	T.							.02		1.88	.04	.36	2.78
Gorin	Mississippi										.02									.04		.05				.11		.10	.65			.14	1.11
Hannibal	do			.02			.05	.06	T.		.02	T.						.02		.09		.02	.01		T.	.01	.11	T.	.39	.30	.03	.45	1.58
Hermann ‖	Missouri	T.			.04			.04	.01									T.	.06	.14	.12		.02			.10		.06		.02	.30	T.	0.91
Jefferson City ‖	do				.05			.05	T.										.18	.30	.10	T.	T.			.66		.15		.30	.02	.04	1.85
Keytesville	Chariton									.22										.50						.02	.22	.76	.71		.38	.52	3.33
Louisiana	Mississippi			.05			.40	.02	T.			T.								.06		.30	.05			.21	.05	.72	1.35	.24	.62		4.07
Macon	Chariton			T.			T.	T.										T.		.17		T.	T.			.02	.81	1.44	1.43	1.02	.66	.25	5.80
Mexico ‖	Mississippi				.24		T.	.05	T.			T.						T.		.25	.07		.01			.05		.15	.11	.40	.22	.32	1.87
Oakfield	Meramec			.02			T.	.07	T.		T.	.03						.09		.13		.03				.14	T.	.47		.50	.32		1.80
Palmyra	Mississippi							.04				T.								.10						.12	.20	.41	.78	1.18	.05	.06	2.94
St. Catherine	Grand			T.			T.	T.	T.									T.	T.	.06		.03	.01			.21	T.	.03	.58	.74	.45	.40	2.51
St. Charles	Missouri							.20	T.		T.									.20		.20				.98		.13	.10	.26	.48		2.55
St. Louis (1)	Mississippi	T.		.01			.02	.02	.01		.31	T.						.06	T.	.20		.03	T.			.06	T.	.27	T.	.24	.02	T.	1.25
St. Louis (2)	do	.03		.02			T.	.06	.01		.16	.05						.08		.28		.02				.06	.01	.27		.20	.09	.01	1.35
Steffenville	do		T.				T.	.05				.05								.05	.03						.03	.55	1.00	.88	T.	.35	2.99
Sublett	do						T.	T.																					.50		2.00		2.50
Unionville ‖	Grand						T.	.06	T.	T.		T.						.15		.25	T.	T.	T.			.15	T.		.20	.90		.12	1.83
Vandalia	Mississippi			.25			T.	T.														T.			T.		T.		.21		.25	.25	0.96
Warrenton ‖	do				.06		T.	.08	.02									.02	.10	.13	.09		.02				.19	.13	.03		.31	.02	1.20
Southeast Lowlands.																																	
Cape Girardeau	Mississippi				.05			T.				.20						.02	.20	.10	.20					.10	T.	.20	.02		.70		1.79
Cardwell	do				T.				T.			1.66					.09		.60							.20	T.	.66		.42	.38		4.01
Caruthersville	do				T.			T.				.60						.12		.80						.25	T.	.65	.02	.60	.38	T.	3.42
Doniphan	Black			.05	.17			T.				.43						T.		.59	T.					.18	T.	1.21	.10	.45	.30		3.48
Jackson	Mississippi							.13			.60						.20			.30						.12	1.15		.06	.41			2.97
Marble Hill	do																			.20		.15				1.00		1.60			.40		3.35
New Madrid	do				.02	.15		.02	.05			.20							.02	.05	.52					.15	.08	.90	.05	.75			2.96
Cairo, Ill.	do			.07	.01			T.	T.		.05	.12					T.	.19		.35			T.			.29	.25	.91	.12	.87	.08		3.31
Ozark Plateau.																																	
Arlington	Gasconade			T.	T.				.06									.07	.12	.08	.16					.22					.68		1.39
Bagnell	Osage																																
Belle	Meramec			T.				.10												.45		T.				.70		.40		.50			2.15
Birchtree	Black											.38								.38						.25		.52		.68	.15		2.36
Bolivar	Osage			.34			T.	T.				T.							.05	.44		T.				1.10		.10		.85	.33	.08	3.29
Cassville	White							.12			T.	.11							T.	.47	.01	.02				.91			.40	.11	1.60		3.75
Crocker	Gasconade							.10			T.								T.	.50		T.							.05	.73			1.38
Dean	Neosho			T.			T.	T.												.30		.11				1.44	T.			.22	.69		2.76
Duncan	Osage			.01	.07		T	.05	.01			T.					T.	.06	.08	.45		T.				.67	.01	.31	.26	.06	.06		2.10
Eldon	do			.01			.01	.04	T.									.03	.02	.61		T.				.89		.05	.03	.65	.01	.02	2.37
Fruit City	Black			.70														.40		.30					.32		.05		.05	.20			2.02
Gano	Meramec			T.				.07				.06						.20		.60		.04				.16		.28		.42			1.83
Goodland	Black			T.				.05				.83						.19		.40		.05				.14		.57					2.23
Hollister	White				.20							.20								.60						1.75	.15			.60	.30	.20	4.00
Houston	Gasconade	T.			T.			T.			T.						T.	.10	T.	.20	.25	T.				.30		.31	T.	.63	.32	T.	2.11
Ironton ‖	Mississippi				.05			T.	.04			.40						T.	.10	.20	.15		.04			.18	T.	.55	.05		.55		2.31
Koshkonong	Black			.06	.27		T					.26						T.		.60						.62	.02	T.	.65	.40	.37		3.25
Lebanon	Osage				.02		.02	.06				.05						T.	.04	.40		.04				1.06		.40	T.	.70	.03		2.76
Lockwood	do			.13			T.				T.								T.	.34						1.24				.60	.44	.64	3.39
Mountain Grove	White			T.	.05		T.	.04									T.		T.	.16		T.				.57		.48	.23	.37	.23		2.13
Mount Vernon	Neosho						T.	T.												.48		T.				1.69				.15	.80		3.12
Neosho	do			T.			T.	T.			T.	.09						T.	T.	.30		.02				2.93				.14	.44	.15	4.08
Rolla	Meramec			T.				.80	T.									.26	T.	.41		T.						1.19	.15	1.23			4.04
Springfield	White			.11		T.	.01	.01			.03	T.						T.	.02	.32		.01			.80	.59	.03	.16	.14	.26	.41	.46	3.37
Wheatland	Osage			.10			T.											.10	.10	.60										1.00			1.90
Southwest Plain.																																	
Amoret	Osage						T.	T.										T.	T.	.12	T.	T.				T.	.70	.26	1.40	.70	.15	.69	4.02
Appleton City	do																		.10									.70		1.00			1.80
Clinton	do																		.60						.20		.60			.90		1.25	3.55
Harrisonville ‖	do							T.										.03		.30	.20					.02		1.52	.50	1.02	.15	.50	4.24
Joplin	Neosho			.10				T.			T.									.15		T.				.90				.40	.60	.40	2.55
Lamar ‖	do				T.			T.				T.						T	T.	.38	T.					.51				.78	.08	.52	2.27
Lamonte	Missouri			.25														T.	.20								1.10	.15	.35	.90	T.	.33	3.28
Marshall	do			.02			T.	.05										T.	.05	.60		.05	T.			.10		.30	.36	.65	1.25	.35	3.78
Nevada	Osage					T.	T.				.02							T.		.25						.50			.65	.02	.72		2.16
Osceola	do																																
Warrensburg	Missouri			.07			.02	.02										.03	.08	.32		.04				.10	.19	.23	.38	1.06	T.	.90	3.44
Warsaw	Osage			T.			T.	.05											.10	.41		.05				.41				.52	.56		2.10
Northwest Plateau.																																	
Avalon	Grand																		.35							.15	.40	.85	.65		.45	.90	3.75
Bethany	do																																
Conception	Missouri						T.	T.										.12	.30	.10		T.			T.	.69		.09	.76	.41	.28	.71	3.46
Grant City	Grand						T.	T.	T.									.08		.12						.56		.09	.59	.89	.15	.58	3.06
Kansas City	Missouri			T.		T.	.02	T.										.02	.36	.22		.01			.25		T.	T.	.98	.68	.01	.47	3.02
Kidder ‖	Grand							T.												.23		T.				.30			.77		T.	.18	1.48
Lexington ‖	Missouri								.02											.45	.05					.04		.92	.27	2.08		.25	4.08
Liberty	do					T.	T.	T.											.20	.50		T.			.50			T.	.75	1.05	T.	.70	3.70
Maryville ‖	do					T.	T.	.05										.17		.30						.25			.20	1.20	.31	.98	3.46
Oregon	do					T.	T.	T.										.10		.45		T.				.31		.45	.95		.54	.50	3.30
St. Joseph	do					T.	T.	T.										.04	.36	.09		T.			.31			.10	3.01		.17	.61	4.69
Tarkio	do																																
Trenton	Grand					T.	.04	.03									.02	T.	.11	.10	.02	.03			.24		.06	.83	1.14	.03	.76	.06	3.47

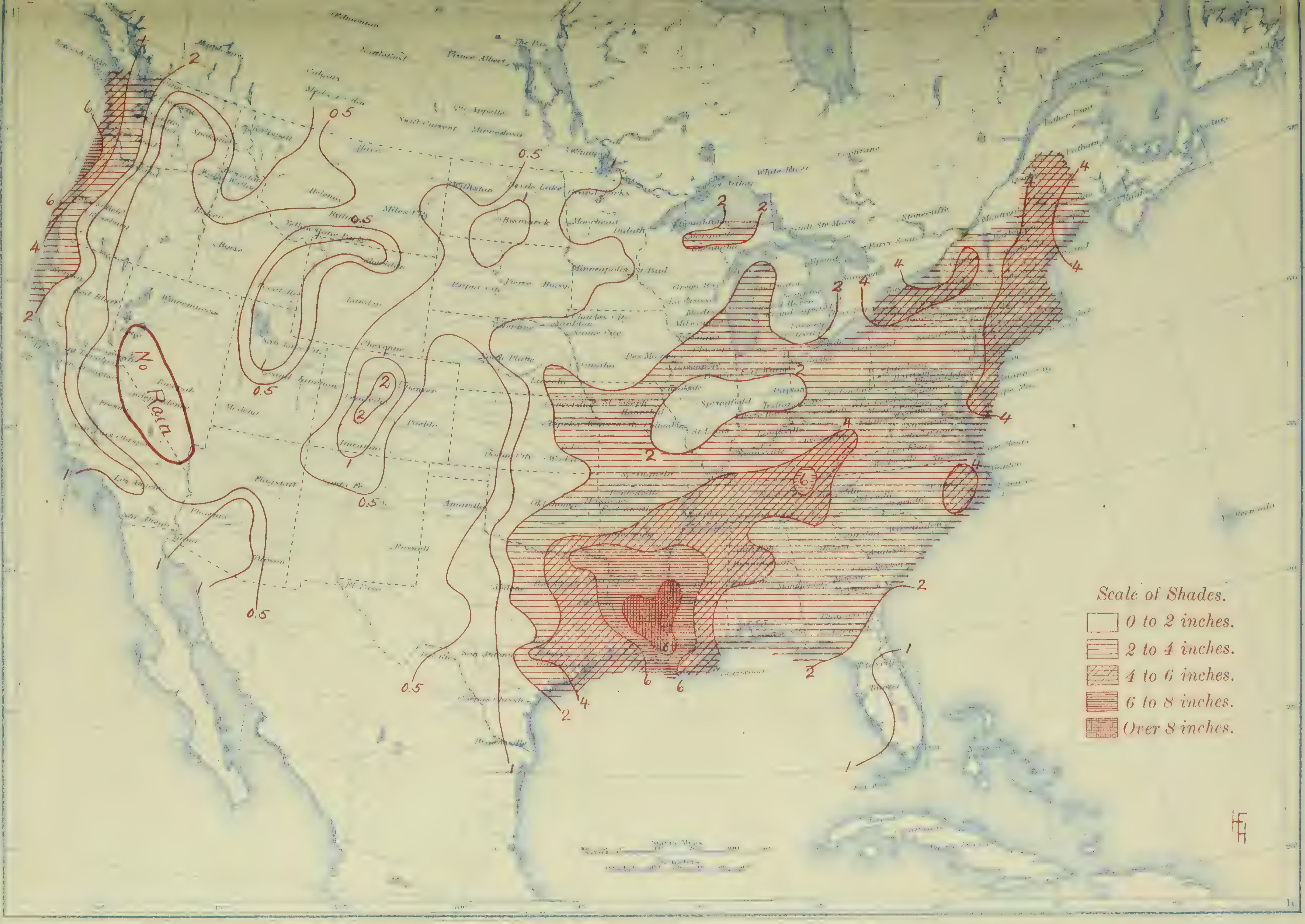
‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours.
T. Trace, or less than 0.01 inch.

Daily temperatures for March, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	30	40	38	50	52	42	36	40	47	53	53	50	64	74	79	58	54	36	37	39	35	48	51	71	70	75	59	75	69	54	62	52.9
	Minimum	16	18	23	23	29	34	29	26	22	31	29	29	22	27	38	53	37	22	25	13	17	17	20	32	41	49	50	49	52	48	44	31.1
Columbia	Maximum	27	39	35	43	50	40	34	37	47	48	34	47	62	69	79	55	53	36	30	37	37	46	58	68	70	73	61	77	67	58	69	51.2
	Minimum	16	19	24	16	30	30	29	26	23	33	28	21	30	43	42	40	32	23	20	8	26	19	26	40	50	56	49	49	54	47	45	32.1
Fayette	Maximum	25	38	34	44	50	38	32	37	46	48	32	44	59	70	76	54	52	32	29	34	31	45	55	69	67	71	58	72	66	55	65	49.3
	Minimum	15	15	25	18	29	29	29	24	22	30	24	21	28	40	40	38	30	22	19	9	22	16	23	34	49	54	50	48	53	44	43	30.4
Hannibal	Maximum	24	33	35	42	50	36	34	34	43	48	34	44	58	68	74	55	51	34	31	38	39	44	52	66	68	76	59	72	64	55	60	49.1
	Minimum	10	15	26	20	33	31	30	27	23	31	28	24	31	40	37	40	29	24	23	17	29	23	27	35	50	58	45	45	55	44	42	32.0
Jefferson City §§	Maximum	27	45	38	46	51	42	33	38	50	49	32	50	66	78	80	56	54	40	30	40	41	48	64	69	74	75	69	77	72	61	.	53.2a
	Minimum	15	14	15	15	16	30	25	23	19	22	27	19	23	27	43	40	34	20	22	9	14	16	20	27	42	49	51	49	51	51	43	28.1
Macon	Maximum	42	35	38	47	50	43	34	36	44	48	37	46	60	70	75	68	40	40	34	36	35	44	51	64	66	74	60	62	66	62	55	50.4
	Minimum	11	15	26	22	31	32	28	25	20	28	27	21	28	41	39	40	40	20	25	16	25	18	25	30	48	53	46	45	52	43	41	31.0
Mexico §§	Maximum	25	35	35	41	50	38	35	38	45	46	33	47	62	70	78	54	54	35	31	38	40	46	58	68	71	76	58	77	67	54	59	50.5
	Minimum	9	9	12	9	9	32	28	29	22	22	28	22	23	23	38	41	37	23	25	10	12	20	20	26	38	49	52	46	50	49	42	27.6
Oakfield	Maximum	45	37	40	45	53	44	37	37	45	48	42	45	63	78	80	72	53	42	35	37	43	45	57	66	74	75	69	75	69	64	67	54.3
	Minimum	16	13	28	19	28	33	28	26	23	31	27	25	31	45	44	45	38	23	23	13	27	24	27	42	51	58	52	48	56	48	43	33.4
St. Catherine	Maximum	45	35	39	45	51	43	35	40	43	47	42	46	57	62	75	64	54	39	32	39	33	43	50	68	63	72	63	62	65	59	53	50.5
	Minimum	12	14	31	22	30	33	28	24	20	28	26	22	27	35	41	40	38	20	21	14	26	16	24	32	45	54	44	45	52	42	41	30.6
St. Louis (1)	Maximum	29	35	40	44	52	41	37	37	44	48	33	44	60	77	80	61	53	38	32	37	42	43	55	63	73	72	68	70	65	58	67	51.5
	Minimum	16	17	28	26	32	33	30	30	28	33	29	28	35	41	50	48	34	24	24	20	29	26	31	43	53	58	51	50	58	46	45	35.4
Sublett	Maximum	40	35	40	44	44	40	34	32	42	41	40	46	56	67	74	61	59	50	50	40	37	42	49	65	61	70	60	62	60	55	45	49.8
	Minimum	9	11	13	20	30	30	28	22	33	27	23	20	22	40	37	40	34	18	24	14	22	17	17	30	45	49	41	40	42	41	40	28.4
Unionville §§	Maximum	28	36	40	50	48	38	36	34	48	43	34	51	62	72	75	60	45	36	34	28	30	42	50	62	60	62	56	64	55	46	55	47.9
	Minimum	8	6	12	22	21	32	26	22	18	24	21	18	24	30	36	38	40	19	18	16	15	13	16	26	30	40	42	38	40	41	40	25.6
Warrenton §§	Maximum	24	37	40	45	51	38	35	35	45	45	33	47	64	76	80	57	53	35	27	40	41	46	60	67	76	75	64	75	67	53	67	51.5
	Minimum	15	13	18	20	22	31	28	26	23	25	28	22	25	34	44	42	39	22	22	15	15	23	24	39	41	52	57	47	52	58	43	31.1
Southeast Lowlands.																																	
Cardwell	Maximum	57	43	52	45	53	53	57	55	56	71	65	45	48	78	72	59	50	43	45	45	64	62	63	66	65	70	70	74	70	76	70	59.4
	Minimum	28	20	29	32	33	35	26	24	26	36	35	30	25	35	52	44	43	28	16	25	28	30	32	36	51	58	59	51	50	53	55	37.3
Caruthersville	Maximum	51	48	56	44	52	55	42	46	56	74	61	51	61	71	81	74	55	47	40	43	43	47	65	67	63	66	69	69	68	78	68	58.5
	Minimum	29	19	27	33	35	32	31	28	24	37	33	29	24	38	41	45	41	32	28	20	27	28	31	37	52	52	52	52	55	56	54	36.2
Doniphan	Maximum	56	42	39	38	54	50	42	44	53	70	63	46	60	70	75	68	54	50	42	38	41	46	62	65	63	68	71	68	70	73	70	56.5
	Minimum	25	17	26	31	28	29	29	27	21	33	33	27	23	35	35	42	42	32	28	9	26	26	26	36	51	57	56	48	52	52	52	34.6
Jackson	Maximum	50	42	42	43	53	45	40	41	45	58	54	42	59	70	77	68	58	51	46	37	43	46	60	65	65	65	71	66	70	68	72	55.2
	Minimum	22	16	37	25	23	30	32	30	22	32	30	25	28	30	56	53	53	31	26	15	25	26	25	35	50	55	55	50	51	55	48	35.2
Marble Hill	Maximum	56	58	39	42	54	48	46	42	45	50	41	44	61	65	78	70	52	49	44	32	43	46	60	64	63	65	72	74	69	76	74	55.5
	Minimum	13	16	25	25	27	26	27	29	24	20	19	22	23	26	32	49	30	28	23	8	12	22	23	26	42	46	47	58	56	52	49	29.8
Ozark Plateau.																																	
Birchtree	Maximum	51	43	38	46	53	49	36	43	....	69	53	47	64	76	79	....	57	47	39	38	39	45	63	63	66	64	70	73	65	70	69	55.7b
	Minimum	22	15	25	28	26	32	29	29	....	34	30	23	25	35	38	....	41	27	27	9	25	22	27	37	49	57	54	53	53	52	50	33.6b
Cassville	Maximum	43	55	47	41	54	47	34	51	65	64	46	50	64	76	78	59	56	45	39	37	37	48	64	65	72	70	80	75	64	78	74	57.4
	Minimum	24	25	33	29	23	30	27	19	24	31	29	15	24	30	38	33	38	21	26	10	26	18	26	28	50	50	47	49	53	47	48	31.3
Duncan	Maximum	48	44	39	44	52	43	38	44	55	62	49	46	66	72	79	69	53	40	32	36	35	45	64	65	69	70	71	70	66	71	72	55.1
	Minimum	21	15	30	21	27	29	26	21	20	32	28	16	26	46	47	45	35	24	27	9	25	19	27	33	48	60	55	50	52	49	55	32.8
Eldon	Maximum	45	47	40	49	52	43	33	41	54	51	44	48	66	76	79	67	54	41	32	39	37	47	66	67	74	75	75	77	71	63	73	55.7
	Minimum	18	16	30	22	30	31	27	24	22	30	29	19	31	44	40	42	39	23	20	11	25	17	24	38	48	58	52	52	53	53	47	32.7
Fruit City	Maximum	38	41	39	43	52	50	41	38	50	54	55	45	64	74	79	70	51	55	36	41	40	50	64	66	64	62	63	65	67	69	72	54.5
	Minimum	12	20	20	26	29	36	30	28	25	32	30	26	28	40	48	40	40	30	26	25	26	28	40	52	53	48	32	53	55	56	40	34.6
Gano	Maximum	47	47	37	48	52	45	34	38	53	59	45	46	68	78	83	65	54	43	52	40	41	46	65	65	72	69	73	71	67	70	71	55.6
	Minimum	31	12	30	21	25	32	27	24	30	36	28	22	30	40	47	45	36	25	25	9	25	24	24	40	49	57	54	50	55	56	48	34.1
Hollister	Maximum	42	48	42	38	46	48	36	46	62	64	38	50	70	82	84	74	58	44	46	40	38	50	68	70	74	70	78	76	64	76	76	58.0
	Minimum	28	28	34	32	30	26	30	24	24	32	34	16	26	36	44	46	44	28	32	20	28	22	32	36	44	48	52	54	52	46	54	34.9
Ironton§§	Maximum	33	45	38	45	53	45	36	38	51	61	34	48	66	76	80	55	52	41	31	39	42	47	63	66	70	64	73	66	70	62	73	53.7
	Minimum	21	12	27	22	20	27	30	26	18	25	29	26	22	37	31	46	32	25	27	0	24	25	23	33	51	58	57	48	56	55	47	31.6
Lebanon	Maximum	52	48	60	42	57	50	38	60	62	61	47	52	67	82	80	67	54	45	34	42	36	47	65	63	70	71	73	72	73	73	71	58.5
	Minimum	20	27	28	30	16	27	25	30	48	27	27	30	32	52	50	41	40	22	25	10	27	18	15	17	48	50	55	56	53	55	53	34.3
Mountain Grove	Maximum	50	42	40	40	52	44	35	42	53	62	51	55	64	77	79	69	55	47	32	37	38	45	65	68	66	66	69	68	65	72	70	55.4
	Minimum	17	14	30	24	25	28	25	21	24	37	28	17	35	37	46	44	40	25	25	14	24	17	27	37	47	58	55	54	55	52	55	33.5
Neosho	Maximum	54	62	56	47	54	51	40	59	67	64	47	49	68	79	80	75	56	54	42	38	37	49	66	66	73	72	79	78	75	74	74	60.8
	Minimum	26	23	37	28	25	31	28	19	28	37	31	15	30	43	48	38	36	22	26	20	29	17	27	37	48	60	46	51	54	49	55	34.3
Rolla	Maximum	30	46	42	45	52	49	35	38	52	54	46	48	67	77	80	75	60	49	45	40	29	46	64	64	70	73	72	72	68	68	68	55.3
	Minimum	19	15	29	21	26	30	26	21	21	26	28	21	30	41	48	40	40	26	25	7	22	20	26	40	58	50	55	53	52	55	48	32.9
Springfield	Maximum	34	45	36	44	51	42	30	43	55	61	36	44	64	76	77	57	50	38	33	35	32	45	63	64	69	69	72	70	65	71	69	52.9
	Minimum	23	21	30	27	31	28	26	24	29	36	24	21	33	43	51	46	35	27	20	17	25	19	34	42	48	57	54	56	54	52	51	35.0
Southwest Plain.																																	
Amoret	Maximum	50	49	47	52	53	51	41	51	59	58	49	53	67	77	51	82	63	52	33	40	38	48	68	70	72	77	75	78	75	71	74	58.7
	Minimum	22	22	33	28	33	31	27	23	27	32	26	21	31	40	23	41	41	27	24	12	27	27	25	41	41	54	50	54	60	50	50	33.6
Clinton	Maximum	32	42	50	50	54	53	37	40	56	54	45	50	70	77	80	68	54	58	46	39	39	55	67	75	72	74	72	78	73	70	73	58.2
	Minimum	10	22	10	25	31	34	28	25	48	34	30	35	40	40	50	45	28	25	25	12	21	18	25	35	45	59	50	57	53	51	52	34.3
Harrisonville§§	Maximum	30	44	39	47	50	43	35	45	52	49	40	54	65	76	83	59	54	32	31	37	34	53	66	68	69	77	66	76	70	57	71	53.9
	Minimum	22	20	23	28	27	32	28	26	26	29	28	21	23	29	41	42	41	25	25	12	12	16	20	27	42	44	50	50	53	54	47	31.1
Lamar§§	Maximum	37	52	40	49	56	48	35	60	62	56	58	51	67	76	82	57	55	37	32	39	36	51	67	67	72	73	77	78	68	74	74	57.0
	Minimum	25	25	28	26	29	31	28	24	30	36	51	20	27	35	48	43	41	28	25	13	18	18	26	37	46	50	49	50	54	50	54	33.7
Lamonte	Maximum	44	41	43	48	50	43	34	43	51	49	43	48	62	72	77	67	52	43	32	43	32	48	62	66	70	73	67	77	67	64	70	54.3
	Minimum	18	20	28	25	26	31	28	26	24	20	27	22	27	36	40	39	39	25	25	12	22	15	24	34	41	53	51	53	51	53	47	32.1
Marshall	Maximum	45	40	28	46	51	45	36	41	47	50	43	48	61	71	76	67	53	43	34	28	34	47	56	71	68	74	67	73	67	67	67	53.7
	Minimum	16	19	30	23	29	31	28	27	23	31	28	21	28	40	41	41	34	23	25	8	24	15	24	24	47	53	53	49	40	45	45	31.1
Warrensburg	Maximum	45	45	40	49	52	42	34	44	51	48	43	50	65	74	80	69	53	43	32	40	34	53	63	69	71	75	65	77	69	60	72	55.1
	Minimum	20	20	32	27	33	32	27	26	24	31	27	23	30	42	44	46	41	24	24	13	24	17	28	37	46	55	50	52	52	51	47	33.7
Warsaw	Maximum	46	51	45	51	46	49	39	45	56	49	48	50	68	76	85	76	55	45	33	40	34	52	68	72	75	78	83	80	78	72	69	58.5
	Minimum	22	20	33	27	28	33	28	21	22	28	30	17	22	39	42	43	35	27	26	8	27	19	27	36	43	50	50	55	55	53	60	33.2
Northwest Plateau.																																	
Avalon	Maximum	44	40	39	47	48	40	37	39	48	48	43	50	62	74	79	70	54	41	36	39	33	43	54	69	67	71	66	67	60	60	56	52.4
	Minimum	14	18	29	26	27	33	28	26	24	28	26	23	28	40	38	38	39	22	24	13	26	14	25	36	44	42	48	52	48	45	43	31.2
Grant City	Maximum	26	36	45	46	47	40	31	38	41	43	35	54	63	71	77	69	59	35	33	38	32	45	51	64	63	56	54	60	55	50	49	49.1
	Minimum	10	11	28	26	32	30	27	21	23	29	20	21	28	35	29	28	35	20	20	13	22	11	22	32	36	49	40	46	47	41	40	28.9
Kansas City	Maximum	30	42	43	48	50	41	36	45	50	50	38	53	65	75	82	60	51	35	30	35	32	48	57	66	66	68	61	73	68	55	64	52.2
	Minimum	20	22	24	24	36	31	27	28	28	32	25	28	24	41	16	47	35	25	21	16	20	16	27	42	44	54	49	52	53	45	45	34.1
Kidder	Maximum	28	36	40	46	46	43	35	39	45	46	38	57	64	73	77	63	48	28	30	26	31	40	50	42	65	67	58	63	62	48	56	48.4
	Minimum	12	18	30	36	33	32	28	28	27	29	25	27	31	12	43	43	41	23	23	8	26	11	26	35	41	39	40	41	53	42	42	31.5
Lexington§§	Maximum	30	44	37	47	42	42	36	41	48	52	40	50	61	73	79	60	54	32	33	38	33	49	54	70	68	72	58	73	70	55	65	52.1
	Minimum	18	20	20	25	24	32	28	26	26	29	28	22	30	43	40	46	42	24	24	13	25	16	24	36	46	56	49	50	51	49	44	32.8
Maryville§§	Maximum	30	38	46	45	49	39	35	42	46	42	39	58	68	75	77	60	47	29	35	36	32	43	50	64	63	53	58	61	55	47	52	48.8
	Minimum	11	11	17	24	24	30	26	24	25	25	18	18	23	29	38	39	37	20	19	8	8	9	15	21	32	35	39	39	46	40	40	25.5
Oregon	Maximum	37	38	44	43	48	40	35	43	46	44	41	56	64	71	77	60	50	38	31	34	34	38	47	63	59	59	55	61	58	52	56	49.1
	Minimum	14	20	29	26	33	31	26	22	27	29	20	23	30	39	46	42	37	23	19	6	19	8	23	35	36	45	41	49	50	41	42	30.0
St. Joseph	Maximum	29	40	44	45	49	48	35	43	49	46	38	57	66	70	78	57	50	31	30	35	31	39	51	65	64	61	59	66	64	51	57	49.8
	Minimum	15	21	30	26	35	28	26	26	28	31	22	21	32	44	47	45	31	24	16	10	17	12	25	36	39	50	45	52	50	43	43	31.1
Trenton	Maximum	42	35	41	44	45	44	36	38	42	41	40	48	57	66	72	65	58	43	34	38	35	40	47	65	64	65	59	56	61	57	53	49.5
	Minimum	17	15	28	25	22	32	28	25	24	29	23	24	28	38	40	43	40	22	24	15	27	15	25	33	41	50	50	46	51	43	42	31.4

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
0.5
1
2
4
6
8
Springfield
Minneapolis
St Paul
Duluth
Bismarck
Denver
Pueblo
Amarillo
Roswell
El Paso
Los Angeles
Phoenix
Yuma
Cheyenne
Lander
Boise
Baker
Des Moines
Omaha
North Platte
Keokuk
St Louis
Louisville
Sault Ste Marie
White River
Winnipeg
Swift Current
Prince Albert
Edmonton
HH

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

APRIL, 1914

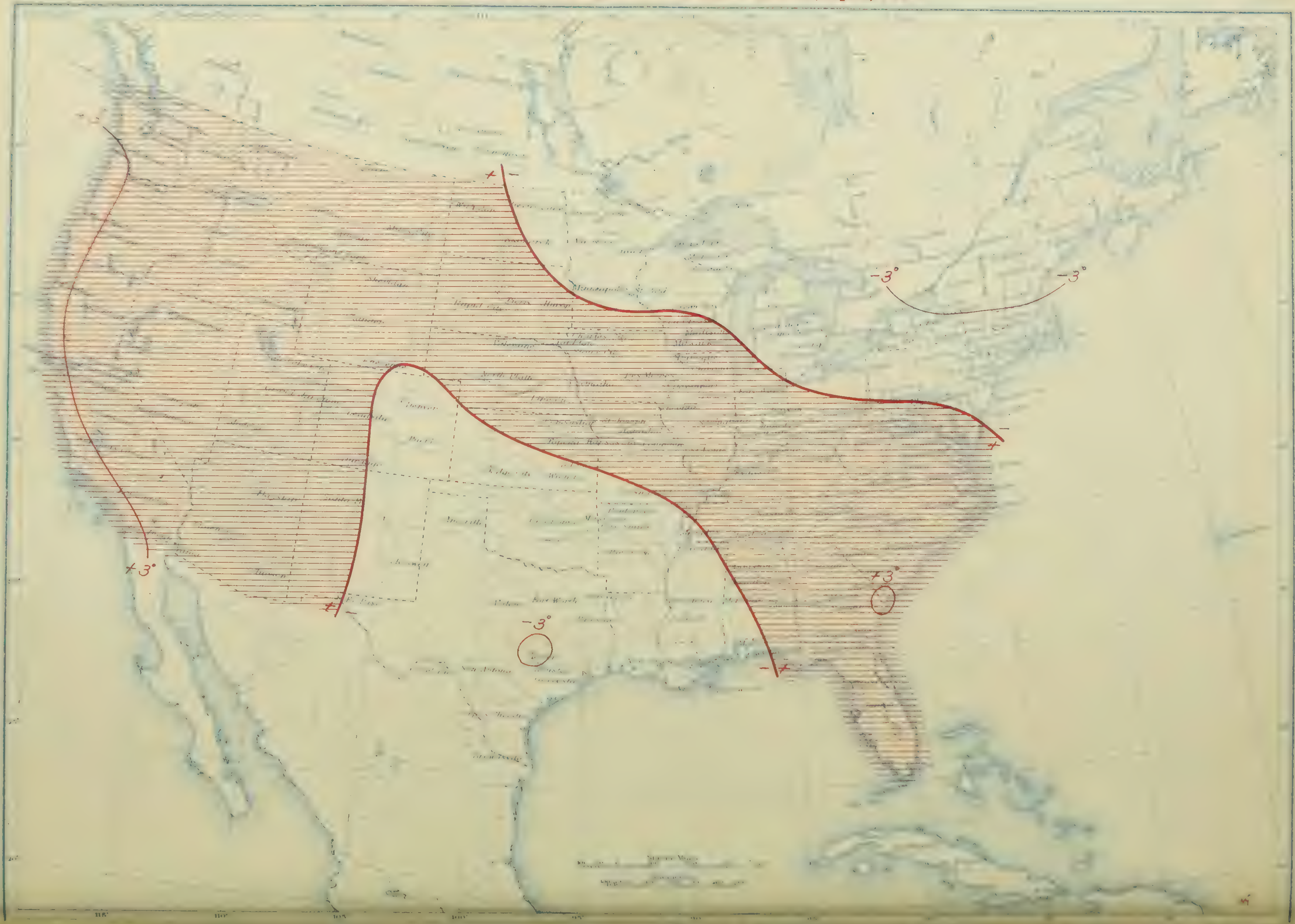
BY

GEORGE REEDER

SECTION DIRECTOR

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, April, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

Vol. XVIII. Columbia, Mo., April, 1914. No. 4

GENERAL SUMMARY.

April, 1914, was favorable throughout the State for outdoor ursuits, farmers in particular benefitting as the weather permitted necessary cultivation of the soil on an extensive scale.

While there was no extreme weather, either cold or warm, here were three well defined warm and three cold periods dur-ng the month. The warm wave that prevailed during the last en days of March overlapped into April including the 1st and d; another warm wave set in on the 15th and continued to he 18th, and a third prevailed from the 21st to the 28th, in-lusive; during the second warm period the daily temperature xcess averaged about 7 degrees, and during the last it averaged 1 degrees. The first cool wave set in on the 3rd and prevailed o the 14th; the lowest temperatures of the month ranging from 5 to 18 degrees above zero, occurred during that period, and he daily temperature deficiency averaged about 8 degrees. wo other cool waves, of not more than 24-hours duration, how-ver, occurred on the 19-20th and on the 29-30th.

The day temperatures during the first half of the month lid not, as a rule, go above 70 degrees, but during the latter ialf they frequently were above 80 degrees, and reached 90 de-grees at two stations, on the 26th and on the 27th. There vere five or six nights when the temperature did not fall below 0 degrees, but as a general thing the nights were much cooler han that value.

In the southeastern lowlands the last freeze occurred on the 0th; along the southern and eastern Ozark border, on the 12-3th, while in the remainder of the State, that is, the south-vest and the northern Ozark slopes, the southwest and northeast lains, and the northwest plateau, the last freeze occurred on he 26th.

While the total precipitation of the month was nearly three-uarters of an inch less than normal, it occurred in the form of requent, and mostly light to moderate, showers, and appar-ntly was sufficient for needs, as it was reported the ground vas in excellent condition. The average number of rainy days vas 8, which is considerably less than normal, as April usually s a rainy month. Showers, however, were more or less general n the 1st, 3rd, 5th, 6th, 11th and 18th, while the last week vas almost continuously unsettled, with showers daily from the 23rd to the 28th. Heavy to excessive local rains occurred dur-ng that period, particularly in the Black River watershed. The urrent River, a tributary of the Black, reached flood stage—he highest in the past six years—resulting in some damage to owlands. There was little of interest in other river conditions, he flow being rather below normal.

Thunder was frequently heard, but there were no well de-veloped, or damaging thunderstorms. The percentage of cloud-ness was somewhat above the average.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 stations reporting, was 30.03 inches, which is but 0.05 inch lower than normal. The highest pressure was 30.45 inches, at St. Joseph on the 30th, and the lowest was 29.52 inches, at Kansas City on the 8th. The greatest local range was 0.92 inch at St. Joseph.

TEMPERATURE.

The monthly mean for the State, as computed from the records of 65 stations, was 55.2 degrees. The mean departure from the normal for 49 stations having ten or more years record was plus 0.1 degree, which shows that the temperature conditions of the month were practically normal. The mean temperature and the departure from normal for each division were as follows: northeast plain, 53.8 degress, or 0.4 degree below normal; southeast lowlands, 58.6 degrees, or 0.7 degree above normal; Ozark plateau, 56.0 degrees, or 0.1 degree above normal; southwest plain, 55.8 degrees, or 0.1 degree below normal; and northwest plateau, 53.7 degrees, or 0.7 degree above normal. The highest temperature recorded was 91 degrees at Steffenville on the 26th, and the lowest was 18 degrees at Goodland on the 9th, giving a range of 73 degrees for the State. The greatest local daily range was 54 degrees on the 22d at Unionville.

The average number of days with temperature 32 or lower was 6 in northeast plain; 4, southeast lowlands; 6, Ozark plateau; 5, southwest plain; 6, northwest plateau, and 5 for the State as a whole. The temperature reached or exceeded the 90 degree value at two stations on two days.

HUMIDITY.

At Columbia the average humidity, 7 a. m., was 74 per cent; at Hannibal, 76 per cent; and at Kansas City, Springfield and St. Louis the average of the 7 a. m. and 7 p. m. readings was 67, 69 and 65 per cent, respectively.

PRECIPITATION.

The average for the State, 78 stations reporting, was 3.14 inches. The departure from the normal for 65 stations having ten or more years record was minus 0.74 inch. The monthly averages and departures for the five divisions of the State were as follows: Northeast plain, 2.69 inches, deficiency 0.91 inch; southeast lowlands, 2.88 inches, deficiency 1.50 inches; Ozark plateau, 4.22 inches, deficiency 0.06 inch; southwest plain, 3.00 inches, deficiency 0.89 inch, and northwest plateau, 2.21 inches, deficiency 0.96 inch. The greatest local monthly precipitation, 7.58 inches, occurred at Birchtree, and the least, 0.81 inch, at Caruthersville. The greatest amount recorded in any 24 consecutive hours was 3.00 inches at Birchtree on the 28th.

From the 25th to the 28th, inclusive, heavy to excessive rains occurred in the Black River watershed in the southeastern part of the State. The Current River, a tributary to the Black, reached flood stage, and considerable lowlands were inundated. The following table shows the accumulated amounts of rain that fell in four consecutive days, i. e., 25th to 28th, inclusive, at several stations in the Black River watershed:

Stations.	Total amount, in inches, for—			
	1st day.	2d day.	3rd day.	4th day.
Birchtree	.36	1.36	2.68	5.65
Doniphan	.45	.60	1.80	2.80
Gano	.34	.43	1.26	3.41
Koshkonong	.91	1.60	2.48	5.02

Snow flurries occurred at a few stations in all divisions on two or three days, but there were no measurable amounts, the snow melting as fast as it fell.

The average number of days with 0.01 inch or more precipitation was 8.

WIND.

The prevailing winds were from the south. The highest velocity recorded was 58 miles an hour from the southwest at St. Louis on the 18th. The average hourly velocity at stations equipped with anemometers was as follows: Columbia, 8.8 miles; Hannibal, 10.2 miles; St. Louis, 13.8 miles; St. Joseph, 9.5 miles; Kansas City, 13.7 miles; Springfield, 10.6 miles; Cairo, Ill., 10.6 miles and Keokuk, Ia., 8.7 miles.

SUNSHINE AND CLOUDINESS.

At Columbia, the percentage of possible sunshine was 53, or about 10 per cent below normal; at Kansas City, the per-

Continued on page 32.

Climatological data for April, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	...	...	...	...	...	...	...	1.99	−2.01	0.74	0	9	14[a]	1[a]	14[a]	sw.	C. Randecker.
Brunswick	Chariton	652	35	52.9	−1.4	85	26	25	9†	52	2.61	−0.59	0.83	0	7	15	1	14	s.	Louis Benecke.
Columbia	Boone	784	25	54.2	−0.1	86	26	24	9	34	1.74	−1.96	0.75	T.	11	6	5	19	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	52.2	−2.9	84	26	23	9	35	1.71	−1.74	0.91	0	5	8[f]	1[f]	15[f]	...	Prof. T. B. Smith.
Fulton	Callaway	818	24	54.9	+0.9	85	16†	23	9	44	3.38	−0.80	1.40	0	6	10[b]	8[b]	10[b]	w.	Russell Johnston.
Glasgow	Howard	618	36	...	...	...	...	...	...	...	3.04	−0.07	1.32	0	4	16	1	13	s.	J. J. Shaughnessy.
Gorin	Scotland	700	26	...	...	...	...	...	...	...	2.54	−1.53	1.68	0	5	11	4	15	nw.	J. W. Pulliam.
Hannibal	Marion	534	22	53.6	0	86	26	24	9	33	2.51	−0.74	1.36	T.	10	11	7	12	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	40	...	...	...	...	...	...	...	2.42	−1.38	0.78	0	9	11	5	14	s.	C. T. Maushund.
Jefferson City	Cole	628	32	53.3	−3.9	85	16†	22	9	52	2.94	−0.65	1.48	0	7	15	1	14	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	...	...	...	...	...	...	...	2.02	...	0.80	0	4	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	500	37	54.1	+0.7	88	26	21	9	43	3.60	+0.59	1.62	0	7	14	8	8	se.	J. T. Farrell.
Macon	Macon	881	2	53.2	...	85	26	24	9	32	2.74	...	1.04	T.	7	8	10	12	sw.	John A. Cook.
Mexico	Audrain	797	37	53.1	−1.2	88	26	24	9†	53	3.05	−0.44	1.35	0	11	14	2	14	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	55.8	−0.2	85	26	22	9	38	3.54	−0.66	1.47	T.	7	7	10	13	ne.	E. E. Steines.
Palmyra	Marion	652	3	52.7	...	87	26	24	9	33	3.86	...	1.31	0	7	8	17	5	nw.	W. B. Markell.
St. Catherine	Linn	914	1	52.6	...	81	26	22	9	34	2.29	...	1.08	T.	5	10	11	9	sw.	L. D. Baker.
St. Charles	St. Charles	614	37	56.0	+0.6	87	26	22	9	40	2.79	−0.61	1.03	0	6	9	7	14	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	56.4	+0.3	82	16	26	9	38	1.92	−1.60	0.73	T.	7	6	16	8	nw.	U. S. Weather Bureau.
St. Louis(2)	......do	578	3	55.6	...	83	16	27	9	38	2.00	...	0.87	T.	8	8	9	13	n.	St. Louis University.
Steffenville	Lewis	576	21	54.1	+1.5	91	26	24	9	39	2.47	−1.16	0.96	0	8	11	9	10	sw.	Frank Hall.
Sublett ‡‡	Adair	1,000	34	52.3	+0.7	85	27	21	9	39	4.30	+0.76	1.40	0	4	2	15	13	w.	Lewis Spriggs.
Unionville	Putnam	1,072	22	50.0	−0.9	84	26	22	9	54	2.31	−1.35	0.75	T.	8	11	4	15	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	55.6	...	90	27	26	9	39	2.30	...	0.82	0	6	11	5	14	n.	C. B. Ellis.
Warrenton	Warren	865	25	54.6	−0,2	86	16†	22	9	51	2.57	−1.32	0.82	0	5	10	5	15	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	...	...	...	...	...	...	...	2.15	−1.92	0.40	0	10	16	3	11	s.	D. L. Albert.
Cardwell	Dunklin	...	3	60.4	...	87	16	27	9	38	2.94	...	0.65	0	9	19	5	6	s.	F. M. Perry.
Caruthersville	Pemiscott	...	23	60.4	+0.8	88	17	29	9†	39	3.06	−0.81	0.78	0	9	21	1	8	se.	H. E. Averill.
Doniphan	Ripley	440	11	58.0	+0.4	84	16	24	9	41	3.91	−1.61	1.20	T.	11	13	5	12	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	57.7	+1.2	88	16	26	9	45	3.06	−1.48	1.30	0	9	6	13	11	s.	J. M. Bean.
Marble Hill	Bollinger	420	23	57.4	+1.3	87	23	20	8	43	2.20	−2.44	0.70	0	5	20	8	2	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	...	...	...	...	...	...	...	3.08	−1.29	0.83	0	13	19	1	10	n.	Miss Josie Smith.
Cairo, Ill.	Alexander, Ill	359	43	58.0	−0.3	83	17	29	9	31	2.64	−0.93	0.90	T.	10	6	9	15	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	25	...	...	...	...	...	...	...	3.44	−0.30	1.16	0	10	14	3	13	se.	G. V. Randolph.
Belle	Maries	1,000	23	56.7[g]	+2.1	86	16	24	9	41	2.67	−1.41	1.60	...	7	2[g]	17[g]	4[g]	s.	A. J. Wofford.
Birchtree	Shannon	1,200	21	55.2	−1.8	86	25	23	9	34	7.58	+2.89	3.00	0	8	19	4	7	sw.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	56.8	+0.7	87	26	22	9	44	4.33	+0.49	1.25	0	11	10	13	7	sw.	T. H. B. Dunnegan.
Cassville	Barry	1,500	4	54.9	...	84	16†	19	9	52	2.83	...	1.02	0	6	23	3	4	s.	Mrs. Zuma Bloomer.
Crocker††	Pulaski	1,300	3	56.6	...	83	26	22	9	33	0.75	...	0.53	0	3	19	8	3	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	16	56.7	−0.7	87	16	19	9	48	1.71	−2.70	0.60	0	7	19[a]	1[a]	9[a]	w.	H. E. Dean.
Duncan	Webster	...	1	55.0	...	83	26	22	9	39	5.56	...	1.00	T.	11	11	10	9	s.	C. A. Mingus.
Eldon	Miller	934	3	55.3	...	85	16†	22	9	39	3.38	...	1.13	T.	11	4	25	1	s.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	1	55.0	...	84	16	25	9	33	4.77	...	1.86	0	10	19	5	6	w.	R. C. Walton.
Gano ‡‡	Dent	...	11	56.5	+0.6	86	16	23	9	35	7.47	+2.62	2.96	T.	10	11	9	10	s.	A. C. Leach.
Goodland	Iron	1,000	10	54.1	−0.4	86	16	18	9	50	5.78	−0.33	2.73	0	7	14	8	8	s.	F. M. Adams.
Hollister	Taney	1,000	5	57.6	...	88	16†	26	9	44	2.75	...	0.60	0	7	20	0	10	sw.	W. P. Chapmann
Houston	Texas	1,280	22	...	...	83	16	...	...	...	3.79	−0.97	1.12	0	9	21	0	9	s.	R. F. Harmon.
Ironton	Iron	925	37	56.2	+0.8	85	16	22	9	48	3.72	−0.66	1.65	T.	12	8	9	13	s.	W. H. Delano.
Koshkonong	Oregon	911	14	59.0	+1.6	85	16	26	9	32	6.94	+2.04	2.54	0	10	13	12	5	se.	J. W. Hitt.
Lebanon	Laclede	1,105	26	55.8	−0.5	85	26	19	9	44	6.63	+2.02	1.30	0	11	17	7	6	n.	O. L. Weissgerber.
Lockwood	Dade	1,088	18	56.6	...	85	16	25	9	37	4.48	+1.08	1.11	T.	11	12	10	8	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	54.8	+0.3	84	21	21	9	37	4.08	−0.36	1.08	0	8	12	8	10	sw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	34	54.6	−1.2	84	17	21	10	47	3.12	−0.34	0.75	T.	7	15	7	8	se.	J. R. White & Son.
Neosho	Newton	1,083	32	57.6	−0.6	87	16	20	9	45	2.71	−1.52	0.80	T.	11	10	8	12	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	56.2	+1.2	85	16	24	9	38	3.35	−1.02	0.93	0	8	15	12	3	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	54.8	−0.9	82	16	25	9	32	3.63	−0.23	0.95	T.	12	11	9	10	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	22	...	...	...	...	...	...	...	2.44	−2.40	0.55	0	6	17	6	7	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	57.0	...	89	25	25	9	42	3.34	...	1.00	0	7	12	8	10	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	54.6	−1.5	84	23	25	9	41	1.75	−2.57	0.56	0	5	7	19	4	se.	Mark Brown.
Clinton	Henry	800	27	56.0	...	87	25	28	8	39	3.12	−1.09	0.85	0	7	10	13	7	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	53.6	−0.4	86	25	25	9†	49	3.09	−0.44	1.25	0	11	9	3	18	sw.	A. J. Sharp.
Joplin	Jasper	975	35	59.0	+0.5	88	16	25	9	38	3.12	−0.65	1.10	T.	6	10	9	11	n.	Joplin High School.
Lamar	Barton	964	34	56.0	−0.9	86	16	24	9	48	3.91	−0.20	1.59	T.	8	13	3	14	s.	E. H. Adams.
Lamonte	Pettis	863	26	54.3	...	85	26	24	9	42	2.60	−1.03	0.80	0	6	10	10	10	s.	J. Ed. Hall.
Marshall	Saline	779	24	54.6	+0.6	85	26	23	9	37	2.52	−1.24	0.91	T.	7	7	12	11	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	...	...	...	...	...	...	...	1.99	−1.81	0.82	0	5	8	12	10	se.	C. Jewell.
Osceola	St. Clair	738	15	...	...	...	...	...	...	...	2.18	−1.82	0.80	0	8	12[b]	1[b]	15[b]	sw.	W. E. Matthews.
Warrensburg	Johnson	883	36	55.8	−0.2	86	16	24	9	39	3.16	+0.21	1.02	0	9	9	10	11	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	57.2	+1.5	89	16	22	9	52	3.85	−0.56	0.98	0	7	14	12	4	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	...	29	55.2	+2.4	84	16	24	9	35	2.63	−1.31	0.88	0	6	15	7	8	sw.	F. G. Ashbaugh.
Bethany††	Harrison	881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W. H. Skinner.
Conception	Nodaway	982	31	52.0	0	82	16	22	8	36	1.94	−0.87	0.60	T.	6	2	17	11	sw.	Fr. Adelhelm Hess.
Grant City††	Worth	1,130	22	52.6	+1.0	82	21†	22	9	38	2.18	−0.77	0.76	0	6	14	2	14	nw.	W. H. Campbell.
Kansas City	Jackson	963	26	55.2	+0.9	83	21	25	8	35	1.76	−1.53	1.12	0	11	7	15	8	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	23	52.4	−0.2	83	21	25	9	46	2.35	−0.73	0.77	T.	10	15	3	12	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	54.4	+0.2	85	25†	23	9	36	2.25	−1.03	0.92	0	9	13	0	17	s.	J. W. Keithley.
Liberty	Clay	864	26	55.9	+0.9	86	16†	23	9	37	2.61	−0.57	1.53	T.	6	10[c]	9[c]	8[c]	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	24	51.4	+0.5	85	16†	21	8†	52	2.06	−1.12	0.50	0	9	16	1	13	n.	J. R. Brink.
Oregon	Holt	1,113	59	53.2	+0.7	90	17	22	8	38	1.63	−1.75	0.55	T.	7	15	4	11	s.	Tom Curry.
Pattonsburg	Daviess	...	5	...	...	...	...	...	...	...	1.66	...	0.58	0	7	14	0	16	nw.	William Burton.
St. Joseph	Buchanan	825	43	54.1	...	85	21	24	8	38	2.54	−0.59	0.75	T.	8	9	7	14	s.	U. S. Weather Bureau
Tarkio††	Atchison	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Prof. M. H. Rees.
Trenton	Grundy	812	20	53.0	+0.2	82	26	25	9	30	2.84	−0.11	0.76	T.	9	9	4	17	sw.	W. H. Estes.
State means and extremes		...	...	55.2	+0.1	91	26	18	9	56	3.14	−0.74	3.00	T.	8	12[a]	7[a]	10[a]	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for April, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
oonville ‖	Missouri	.58		.04				.01	.07		.04								.15					T.	.74			.02	.34				1.99
runswick‖	Grand	.32						.61				T.							.12	T.					.55			.15	.83	.03			2.61
olumbia***	Missouri	.02	T.				.70	.05	T.		.02	.02					T.	T.	.29	T.				.12	.10		.02	.36	.04				1.74
ayette	do						.91	.09											.14					.53				.04					1.71
ulton	do	1.40					.85											.22								.12	.16		.63				3.38
lasgow ‖	do	.28						1.32											T.						.52				.92				3.04
orin	Mississippi						.58												.10					.05				.13	1.68				2.54
annibal***	do	.17	.03				1.24	.12	T.		.02	.03						T.	.06	T.				T.	.02			.18	.64				2,51
ermann‖	Missouri	.48						.68	.06			.10						T.	.01	.08	T.				.01			T.	.78	.22			2.42
efferson City‖	do	1.48						.65	.07			.07							.12	.10					T.				.45				2.94
eytesville	Chariton						.73												.06					.43				T.	.80				2.02
ouisiana	Mississippi	1.62					.72	.55									T.		.02	.04									.55	.10			3.60
acon	Chariton	.11	T.	T.			1.04	.14			T.							.03		T.				.15				.23	1.04				2.74
exico ‖	Mississippi	1.35		T.				.60	.03			.01							.08	.08					.03	.01		.01	.84	.01			3.05
akfield	Meramec	.65					.41	.55	T.		T.	.23					T.	T.	.03	T.				T.			T.	.20	1.47				3.54
almyra	Mississippi	.73					.60	1.31				.06							.06								.48	.62					3.86
t. Catherine	Grand	.03					1.08	T.			T.							T.	.08	T.				.51			T.	T.	.59	T.			2.29
t. Charles	Missouri	.50					.23	1.03				.15						T.		T.				.02				T.	.86				2.79
t. Louis (1)***	Mississippi	.19	T.				.30	.18	T.		T.	.23			T.		T.	T.	.02	T.	T.			T.	T.	T.	T.	.29	.71				1.92
t Louis (2)	do	.21		T.			.30	.15	T.		.01	.20					T.		.07	T.	T.			T.			T.	.19	.87				2.00
teffenville	do	.35	.02				.96	.05				T.								T.				.06	.06			.10	.87				2.47
ublett	do						2.00				T.													.50			.40		1.40				4.30
nionville‖	Grand	.75	T.	.15			T.	.52											.12	.06	T.				.30			.06	.35	T.			2.31
andalia	Mississippi		.32	.12				.82											.08									.22	.74				2.30
arrenton‖	do	.47		T.				.82	T.			.10								T.									.78	.40			2.57
Southeast Lowlands.																																	
ape Girardeau‖	Mississippi			.05				.40	.30			.05				.20				.20						T.	.30	.10	.40	.15			2.15
ardwell	do		.15					.32				.36			.12		.12		.15	.55				T.		.52		.65					2.94
aruthersville	do	.07		.02				.45	.15			.48		T.	.21				T.						T.	.78		.43	.47				3.06
oniphan	Black			.05			T	.24	.02			.30			T.		.05		.32	.13				T.		.45	.15	1.20	1.00				3.91
ackson	Mississippi	.04		.05				1.30				.40			.16				.17							.32		.55	.07				3.06
arble Hill	do											.60			.40											.50	.10	.60					2.20
ew Madrid‖	do	.03		.02				.02	.45			.02	.30			.55				.25						.02	.30	.10	.83	.19			3.08
airo, Ill***	do	.01		T.			T.	.50	T.			.35		T.	.58	T.			.09	.01						.05	.33	.57	.15				2.64
Ozark Plateau																																	
rlington ‖	Gasconade	.58		.07				1.16	.36			.32	.12						.10							.06			.48	.22			3.44
agnell‖	Osage																																
elle	Meramec											1.60							.02								.10	.95					2 67
irchtree	Black			.35				.68				.41							.46							.36	1.00	1.32	3.00				7.58
olivar	Osage	1.25	T.	.58			.25	1.08				.50							.25					.23	.01	.08		.02	.08				4.33
assville	White			.27			.06	1.02				.67															.03	.78					2.83
rocker	Gasconade						.20	.02				T.																	.53				0.75
ean	Neosho	.22		.15			.06	.57			T.	.60							.07					T.				.04					1.71
uncan	Osage	.68		.46		.01	.33	.80			T.	.79							.32						T.	1.00	.22	.15	.80				5.56
ldon	do	1.13		.06			.59	.24	T.		.01	.10							.45	.01				.01				.02	.76				3.38
ruit City	Black	.06		.19			.06	.95				.47							.30		.35					.25		.28	1.86				4.77
ano	Meramec	.53		.11			.35	2.26				.65						T.	.18						T.	.34	.09	.73	2.23				7.47
oodland	Black	.72		.10				.95				.62							.11									.55	2.73				5.78
ollister	White	.10		.20				.50				.35							.45									.55	.60				2.75
ouston	Gasconade	.11		.38			.15	.81				.51			T.	T.	T.	T.	.30					T.		.28	T.	.13	1.12				3.79
ronton‖	Mississippi	.12	.05	.08	T.			.58	.18	T.		T.	.45			.02		T.		.30					T.	T.	.15	.14	1.25	.40			3.72
oshkonong	Black	.02		.09			.05	.92				.42							.42							.91	.69	.88	2.54				6.94
ebanon	Osage	1.15		.40			.90	1.30				.60							.40					.05		.10	.50	.13	1.10				6.63
ockwood	do	.74		.70			.18	.59				.64							.11					.10		1.11	.08	.18	.05				4.48
ountain Grove	White			.42			.23	.64				.53			T.				.32							.58	T.	.28	1.08				4.08
ount Vernon	Neosho	.65		.17			T.	.75		T.		.50										T.			.75		.12	.18					3.12
eosho	do	.80		.25	.02		.05	.41			.01	.75						T.	.20					.14		T.		.05	.03				2.71
olla	Meramec	.63		.07			.18	.77				.42						T.	.10					T.		.25	T.	T.	.93				3.35
pringfield ***	White		.16	.04	T.	T.	.43	.30			.25	.51					T.		.62					.11	.40	.55	.03	.23					3.63
heatland	Osage		.50	.50			.55				.29													.40				.20					2.44
Southwest Plain.																																	
moret	Osage	1.00	T.	.18			.70	.66			T.	T.					T.		.32					.12				.36					3.34
ppleton City	do						.56					.50						.20				.42	.07										1.75
linton	do	.85		.25			.85												.25					.45	.15				.32				3.12
arrisonville ‖	do	.65		.10			.02	1.25	.03			.07							.25					.10	.17			.13	.32				3.09
oplin	Neosho	.70		.32			T.	.45				.40							.15					T.		1.10		T.					3.12
amar ‖	do	1.59		.66	T.		T.	.43				.26	T.						.07					T.	.07	.71		T.	.12				3.91
Lamonte	Missouri	.80					.65	.35										T.	.15	T.				.35	T.			T.	.30				2.60
Marshall	do						.91	.38			.01								.06	T.				.53	T.		T.	.17	.47				2.52
Nevada	Osage	.52		T.	T.		.82												.50									.05	.10				1.99
sceola ‖	do			.21				.80				.25													.12	.40	.03		.24	.13			2.18
arrensburg	Missouri	.60					1.02	.65	T.		.01								.32	.01				.18	T.			.11	.26				3.16
arsaw	Osage	.98					.75	.32			T.	.25							.04					.58	T.			T.	.93				3.85
Northwest Plateau.																																	
Avalon	Grand	.40					.80												.20					.88				.20	.15				2.63
Bethany	do																																
onception	Missouri		T.			T.	.23		T.										.60	.12				.46	T.			.42	.11				1.94
rant City	Grand	T.	T.	T.	T.	T.	.50	T.											.31	.09				.21				.76	.31				2.18
Kansas City***	Missouri	.02	.01				.86	.29			.01							T.	.09	.03				.30			.01	.10	.04				1.76
Kidder ‖	Grand			.02			.12	.77	T.										.20	.05				.03	.47			.27	.40	.02			2.35
Lexington‖	Missouri	.30					.03	.92											.32	.05				.03	.22			.13	.25				2.25
Liberty	do						1.53		T.										.13	.04			.45				.05	.41					2.61
Maryville‖	do						.34	.03								T.			.15	.50				.07	.34			.47	.15	.01			2.06
Oregon	do		T.		.05		.10		T.										.14	.28				.55			.10		.41				1.63
Pattonsburg ‖	Grand	.02		T.		.10		.23										T.	.15	T.					.40			.58	.18				1.66
St. Joseph***	Missouri		.01			.02	.75	T.	T.										.67	.27				.45			.11	.26	T.				2.54
Tarkio	do																																
Trenton	Grand		T.			.23	.38		T.									.16	.06	.04				.48			.70	.76	.03				2.84

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at that time of observation.

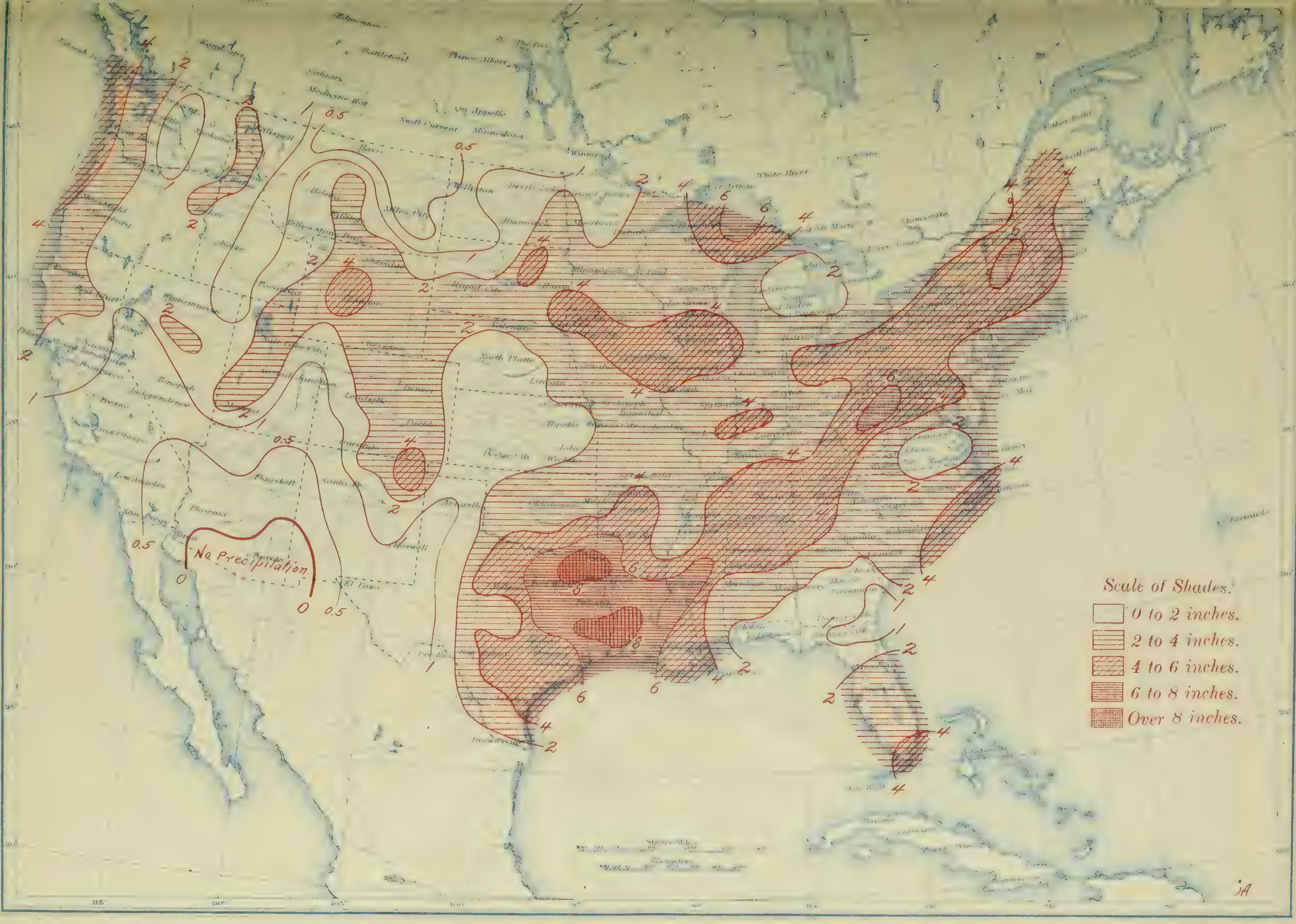
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Daily temperatures for April, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	60	66	46	53	58	57	48	39	47	51	50	61	66	69	76	84	82	70	46	61	83	81	63	80	82	85	79	64	59	53		64.0
	Minimum	39	40	38	30	31	37	39	27	25	25	31	28	34	37	39	43	49	59	38	29	31	54	58	59	60	60	61	61	46	45		41.8
Columbia	Maximum	57	63	46	52	60	56	46	36	46	53	49	57	62	65	72	83	83	70	51	64	84	81	67	81	81	86	81	71	58	58		63.8
	Minimum	48	41	38	31	38	45	33	27	24	33	35	27	37	42	40	50	67	51	37	30	54	60	61	61	63	58	63	51	47	47	...	44.6
Fayette	Maximum	56	63	43	50	58	55	43	33	43	50	45	58	61	68	73	82	80	68	42	62	81	78	62	77	79	84	80	66	56	51	...	61.6
	Minimum	48	40	35	29	36	42	28	25	23	29	35	28	34	42	40	47	61	48	35	29	51	55	57	59	62	59	63	50	45	46		42.8
Hannibal	Maximum	54	62	44	47	54	54	46	36	46	55	46	59	62	66	71	83	84	72	51	59	84	81	71	78	81	86	81	72	56	52	...	63.1
	Minimum	49	44	36	33	34	44	36	28	24	33	33	28	35	39	45	51	60	51	37	34	51	60	52	62	62	57	64	51	46	46		44.2
Jefferson City §§	Maximum	58	68	46	56	63	59	46	37	49	56	47	60	65	69	76	85	80	74	46	68	84	84	72	81	85	85	81	77	58	59	...	65.8
	Minimum	45	39	36	28	31	37	36	24	22	25	32	26	31	32	40	44	53	56	40	28	32	53	58	58	59	53	61	58	44	44	...	40.8
Macon	Maximum	54	62	49	46	55	54	47	38	44	50	45	55	58	65	67	83	83	73	57	62	83	82	76	79	80	85	80	71	57	54	...	63.1
	Minimum	48	40	34	30	35	34	35	26	24	32	35	30	36	39	41	51	59	57	37	30	51	58	52	58	60	59	61	55	44	44	...	43.2
Mexico §§	Maximum	55	66	44	54	59	57	46	37	48	54	48	60	64	66	73	84	83	73	43	64	86	81	70	81	85	88	83	74	54	54	...	64.5
	Minimum	42	41	37	30	31	36	37	26	24	24	31	27	31	32	40	44	50	60	41	33	33	50	58	60	66	57	64	60	46	45	...	41.7
Oakfield	Maximum	62	66	53	55	57	60	55	41	46	56	51	59	64	62	72	82	78	73	63	61	84	82	80	80	81	85	78	74	67	54	...	66.0
	Minimum	43	44	39	32	35	46	35	29	22	32	36	29	39	43	44	50	63	63	38	34	46	59	62	60	64	61	63	61	49	47	...	45.6
St. Catherine	Maximum	54	63	50	47	53	53	45	38	45	55	51	60	63	63	72	80	80	70	51	62	80	80	74	78	79	81	79	70	57	53	...	62.9
	Minimum	47	37	34	27	34	44	36	26	22	32	34	26	34	39	39	47	64	53	37	30	49	58	52	58	54	58	62	51	44	43	...	42.4
St. Louis (1)	Maximum	60	65	48	55	54	60	54	38	46	57	51	57	64	61	71	82	80	72	57	59	81	82	81	81	79	82	76	74	61	54	...	64.7
	Minimum	53	48	40	38	36	46	36	30	26	34	40	36	41	50	53	51	64	57	38	35	43	62	65	60	67	63	65	59	52	46	...	48.9
Sublett	Maximum	60	61	49	48	52	51	44	35	45	55	55	58	63	66	71	81	81	80	54	62	80	80	80	79	80	80	85	80	81	53	...	65.9
	Minimum	38	37	31	29	33	32	33	25	21	32	31	27	31	33	35	44	44	45	35	27	61	61	50	57	55	59	54	43	42	42	...	39.6
Unionville §§	Maximum	52	56	40	42	52	50	44	35	43	54	50	60	62	60	73	82	78	66	40	62	82	76	66	75	80	84	86	62	56	50	...	60.4
	Minimum	40	37	30	29	31	36	33	25	22	25	30	31	34	35	40	45	56	54	35	25	28	56	50	52	56	54	56	58	42	40	...	39.5
Warrenton §§	Maximum	55	65	45	55	58	62	43	33	49	54	47	60	66	65	71	86	80	73	48	65	86	84	80	81	85	86	81	74	57	53	...	64.9
	Minimum	43	42	38	31	34	37	39	27	22	25	36	30	38	44	45	49	58	65	44	34	35	50	60	59	62	62	64	63	47	46	...	44.3
Southeast Lowlands.																																	
Cardwell	Maximum	77	70	66	67	68	76	70	44	50	60	57	60	65	60	75	87	86	80	71	68	81	83	80	84	80	86	83	76	78	77	...	72.2
	Minimum	54	46	38	39	42	45	40	36	27	30	45	35	36	48	42	49	65	60	48	38	47	56	60	68	65	67	63	60	60	59	...	48.6
Caruthersville	Maximum	76	75	61	64	6	75	69	42	52	57	53	61	69	57	74	85	88	76	71	69	79	87	83	85	77	84	81	74	80	73	...	71.5
	Minimum	56	47	49	39	45	45	42	35	29	29	45	37	37	48	44	46	64	64	64	42	43	50	60	58	65	60	60	66	63	52	...	49.3
Doniphan	Maximum	73	73	66	59	64	72	63	43	49	58	53	62	62	63	75	84	81	78	71	70	80	80	75	81	79	82	75	77	80	74	...	70.1
	Minimum	52	44	44	36	39	41	39	35	24	27	42	30	30	46	42	43	63	58	47	35	42	50	56	56	60	61	64	63	58	49	...	45.9
Jackson	Maximum	68	69	64	50	63	70	62	44	48	56	55	59	67	60	60	88	83	76	70	61	80	83	74	83	78	83	77	76	74	63	...	68.1
	Minimum	55	47	42	34	40	45	38	31	26	31	41	31	32	49	46	43	60	61	48	38	43	53	60	60	64	62	65	65	56	49	...	47.3
Marble Hill	Maximum	71	70	71	72	64	62	56	51	48	51	56	59	65	64	72	85	82	71	68	69	77	82	87	85	83	82	77	78	82	63	...	70.1
	Minimum	55	46	44	42	48	47	32	20	24	25	27	31	30	33	41	42	65	60	31	40	41	56	61	57	56	58	64	56	63	49	...	44.6
Ozark Plateau.																																	
Birchtree	Maximum	66	70	60	55	64	68	58	42	47	52	51	61	61	63	74	80	78	74	61	68	75	80	73	80	86	78	72	...	...	...	...	66.6
	Minimum	44	44	40	32	30	46	37	30	23	30	39	27	34	45	41	46	62	56	47	34	48	52	59	59	57	60	62	...	...	...	...	43.9
Cassville	Maximum	70	75	61	60	62	73	60	41	50	60	54	58	62	69	76	84	75	70	61	73	80	79	75	81	81	81	68	78	72	71	...	68.9
	Minimum	42	37	43	38	35	50	37	28	19	25	36	24	28	37	33	40	64	48	39	29	42	41	57	59	55	52	59	54	48	45		40.9
Duncan	Maximum	66	70	62	54	65	60	55	39	48	50	53	58	64	67	72	81	74	71	54	70	82	81	75	77	81	80	71	74	70	78	...	66.8
	Minimum	49	39	37	29	37	48	37	27	22	27	34	26	32	37	36	46	59	54	45	31	57	48	59	58	52	59	61	59	49	42	...	43.2
Eldon	Maximum	61	68	59	56	63	58	54	39	49	56	51	59	65	67	71	85	73	70	57	68	84	82	71	80	85	79	79	76	61	62	...	66.4
	Minimum	50	40	39	29	37	50	37	26	22	29	38	29	34	40	40	50	63	55	39	29	51	55	59	59	60	58	63	54	46	44	...	44.2
Fruit City	Maximum	68	68	64	56	61	69	56	40	47	57	51	59	60	60	72	84	77	73	63	60	66	81	75	80	78	76	65	78	55	49	...	65.1
	Minimum	51	47	47	34	42	45	40	32	25	30	30	34	39	36	45	51	61	49	45	43	38	56	56	60	61	60	55	52	45	39	...	44.9
Gano	Maximum	67	68	60	57	66	65	55	40	48	57	54	60	66	62	73	86	78	74	57	67	83	83	80	83	83	81	77	76	68	64	...	67.9
	Minimum	50	41	38	30	39	48	36	28	23	32	34	28	33	43	42	52	61	57	41	32	50	57	62	60	57	62	62	60	49	47	...	45.1
Hollister	Maximum	70	74	66	58	60	66	50	42	52	62	52	62	62	72	76	88	86	84	64	76	84	82	72	80	88	88	72	78	76	72	...	70.5
	Minimum	46	44	42	38	40	46	42	30	26	32	31	32	38	38	36	44	56	48	46	44	42	44	55	56	58	68	62	60	52	44		44.7
Ironton §§	Maximum	65	69	54	58	62	70	55	39	49	58	46	60	61	60	73	85	79	68	58	67	81	83	79	83	79	79	76	76	74	63	...	67.1
	Minimum	53	44	42	28	39	44	53	31	22	25	44	27	27	42	42	37	61	64	48	38	40	49	58	57	62	55	63	64	54	46	...	45.3
Lebanon	Maximum	68	72	62	57	67	62	55	45	50	59	55	62	67	72	76	78	83	70	55	72	72	82	75	79	81	85	73	78	74	71	...	68.6
	Minimum	58	40	38	29	37	50	37	26	19	31	37	26	34	38	40	47	50	53	40	28	42	55	57	59	49	58	63	58	49	42	...	43.0
Mountain Grove	Maximum	65	68	65	56	63	60	56	38	46	56	52	52	62	66	72	82	76	66	57	68	84	76	75	76	74	82	79	75	70	68	...	66.2
	Minimum	48	42	38	30	37	47	37	27	21	28	29	27	34	40	40	52	48	57	42	32	47	50	60	59	57	62	60	60	50	43	...	43.5
Neosho	Maximum	68	74	71	60	67	71	64	43	50	61	54	57	65	68	75	87	85	75	62	76	82	81	78	83	84	85	80	75	69	70	...	70.7
	Minimum	44	40	43	39	42	54	39	29	20	28	35	26	31	36	37	50	64	54	48	31	54	52	58	58	[illegible]	60	63	52	46	45	...	41.4
Rolla	Maximum	69	61	51	58	64	62	55	44	50	58	54	60	64	66	72	85	70	72	61	69	83	82	82	79	83	83	77	76	67	65	...	67.3
	Minimum	51	45	39	30	36	40	37	27	24	32	38	30	32	45	42	50	65	56	46	31	52	56	57	60	58	60	65	62	49	43	...	45.1
Springfield	Maximum	63	67	48	50	62	63	54	36	44	58	46	55	59	64	71	82	74	67	53	68	82	76	67	76	80	80	70	72	66	66	...	64.0
	Minimum	50	46	37	36	42	52	32	27	25	33	33	32	40	46	45	53	63	49	44	36	53	60	55	57	57	63	60	54	48	44	...	45.7
Southwest Plain.																																	
Amoret	Maximum	67	70	69	55	62	61	60	43	49	59	55	61	67	71	79	83	80	76	70	74	83	80	75	86	89	85	88	71	67	63	...	69.9
	Minimum	50	42	40	31	37	51	39	27	25	34	38	28	36	39	43	49	63	51	36	32	51	52	56	60	60	63	60	52	39	42	...	44.2
Clinton	Maximum	60	63	53	53	65	59	55	38	48	54	55	60	76	78	76	85	75	70	60	69	80	84	80	81	87	84	78	68	63	61	...	67.3
	Minimum	51	43	40	30	40	49	38	28	30	30	40	45	40	45	40	50	52	55	44	30	46	46	57	60	61	61	61	49	41	42	...	44.8
Harrisonville §§	Maximum	65	68	44	50	63	57	45	37	48	57	48	60	65	67	77	83	79	64	55	72	83	78	69	84	86	84	77	61	61	57	...	64.8
	Minimum	48	40	40	30	32	39	38	28	25	25	35	28	33	37	40	43	51	58	44	30	34	55	57	57	58	60	63	58	40	42	...	42.3
Lamar §§	Maximum	69	71	49	54	65	58	45	36	48	60	48	59	64	68	78	86	76	76	60	74	83	78	76	82	82	85	74	70	67	70	...	67.0
	Minimum	51	43	42	36	36	47	41	30	24	33	37	29	35	40	40	47	61	59	45	35	35	56	57	58	62	63	62	57	43	44	...	44.9
Lamonte	Maximum	62	67	55	53	63	66	55	37	46	53	52	60	62	69	75	83	79	70	52	69	81	78	66	82	84	85	77	68	59	54	...	65.2
	Minimum	51	40	38	27	43	50	35	27	24	29	32	33	33	36	38	49	60	52	35	27	55	50	56	62	58	59	64	52	45	42	...	43.4
Marshall	Maximum	60	67	52	53	59	57	55	39	46	54	51	58	64	69	76	82	82	70	58	65	83	80	72	80	82	85	80	70	55	55	...	65.3
	Minimum	46	39	37	29	37	48	37	26	23	31	37	28	35	45	39	47	69	58	38	28	52	51	56	58	59	59	62	52	42	47	...	43.8
Warrensburg	Maximum	66	68	60	54	65	56	53	38	48	54	53	62	65	68	72	86	80	72	53	70	82	78	71	84	85	81	77	68	60	54	...	66.1
	Minimum	50	42	38	29	38	51	37	35	24	33	39	31	37	41	45	54	62	53	40	31	55	55	56	61	61	62	64	52	45	44	...	45.5
Warsaw	Maximum	78	70	63	53	58	63	55	41	49	55	54	62	65	69	87	89	83	72	57	73	87	87	77	86	85	88	83	80	60	62	...	69.7
	Minimum	56	51	41	31	43	53	39	28	22	28	39	25	30	39	35	40	62	56	42	29	51	54	52	63	61	58	69	56	45	42	...	44.7
Northwest Plateau.																																	
Avalon	Maximum	56	65	53	46	57	55	47	39	46	55	53	62	63	69	75	84	78	75	55	64	82	78	72	80	83	83	78	70	57	54	...	64.4
	Minimum	49	40	34	29	36	46	37	26	21	33	34	31	38	41	46	52	64	55	37	29	51	54	57	59	57	61	63	51	44	44	...	44.1
Grant City	Maximum	55	61	47	47	56	[illegible]	45	39	48	59	54	62	59	69	74	80	78	80	53	63	82	79	74	75	80	82	71	67	53	56	...	63.4
	Minimum	42	35	30	28	33	42	33	21	22	34	32	30	36	35	36	46	46	47	32	28	50	55	54	59	55	56	58	42	41	41	...	41.7
Kansas City	Maximum	64	67	47	51	58	56	44	39	47	58	48	60	62	67	77	82	78	68	54	70	83	77	68	83	83	81	76	63	58	54	...	64.1
	Minimum	47	46	35	31	39	44	32	25	29	37	38	36	42	48	52	60	66	49	40	35	58	61	57	62	62	66	63	47	43	46	...	45.4
Kidder §§	Maximum	57	62	38	42	58	53	44	48	46	48	47	60	64	68	75	81	77	65	50	65	83	72	63	79	80	82	73	59	56	51	...	61.2
	Minimum	46	39	34	29	35	52	35	26	25	38	32	34	39	41	58	54	52	52	36	28	37	53	57	61	56	61	60	50	43	44	...	43.6
Lexington §§	Maximum	62	68	43	52	60	56	46	39	46	55	47	60	64	68	78	83	78	67	51	66	82	80	64	82	85	85	74	62	62	51	...	63.9
	Minimum	50	46	38	28	38	50	37	27	23	34	37	32	34	38	42	47	63	58	38	30	56	54	59	61	60	61	62	60	44	44	...	44.8
Maryville §§	Maximum	55	61	37	47	56	51	42	39	48	60	50	66	66	70	79	85	82	55	56	69	85	79	65	78	83	84	74	57	53	56	...	63.9
	Minimum	41	37	31	30	31	31	33	21	21	21	29	29	35	35	35	46	52	56	32	29	33	55	57	56	54	55	58	42	41	40	...	38.9
Oregon	Maximum	58	62	52	49	57	54	45	39	47	60	58	62	63	67	76	82	90	60	54	70	85	78	72	77	80	82	73	70	52	55	...	64.3
	Minimum	42	37	24	31	35	42	33	22	24	35	30	29	32	40	47	52	58	44	31	32	56	58	57	59	56	60	60	42	41	43	...	42.2
St. Joseph	Maximum	60	63	45	48	59	55	44	39	48	59	48	62	64	68	77	83	80	68	54	71	85	79	67	79	82	83	77	65	54	56	...	64.1
	Minimum	41	37	33	32	37	40	30	24	26	38	33	32	40	42	50	52	66	45	36	33	58	60	58	62	58	62	62	44	43	45	...	44.1
Trenton	Maximum	55	61	51	44	53	52	45	38	45	56	55	57	62	64	71	78	77	75	54	61	89	80	78	79	79	82	78	72	56	55	...	63.1
	Minimum	44	39	33	29	35	44	35	26	25	34	32	30	36	36	41	49	63	52	35	31	52	58	55	59	57	61	60	50	44	44	...	43.0

[illegible] etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Precipitation
0
0.5
1
2
4
6
8
A

centage of possible was 59; at Springfield, 50; St. Louis, 52; and at St. Joseph, 59. For the State, the average number of clear days was 12, partly cloudy, 7, and cloudy, 11.

MISCELLANEOUS PHENOMENA.

Sleet—7th.

Thunderstorms—1st, 3rd, 17th, 18th, 23rd, 24th, 25th, 26th and 27th.

Killing Frosts—General on the 12th and 13th, and on the 20th, save in the extreme eastern portion of the State.

COMPARATIVE DATA FOR APRIL

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	57.9	+2.8	91	20	1.83	−1.89	......	5
1889	55.7	+0.6	90	26	2.52	−1.20	......	8
1890	56.2	+1.1	93	24	3.17	−0.55	......	8
1891	56.8	+1.7	93	15	3.90	+0.18	......	9
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	11
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	12
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	7
1896	61.9	+6.8	92	17	3.51	−0.21	3.00	9
1897	54.4	−0.7	88	21	4.55	+0.83	3.50	10
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	10
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	8
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	8
1902	53.9	−1.2	95	19	2.66	−1.06	4.35	11
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	9
1904	49.0	−6.1	84	19	5.75	+2.03	6.10	9
1905	54.9	−0.2	92	20	3.19	−0.53	4.00	6
1906	59.5	+4.1	93	22	2.24	−1.48	2.45	8
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	8
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	11
1911	53.5	−1.6	89	20	4.99	+1.27	4.27	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	7
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	8

5

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MAY, 1914

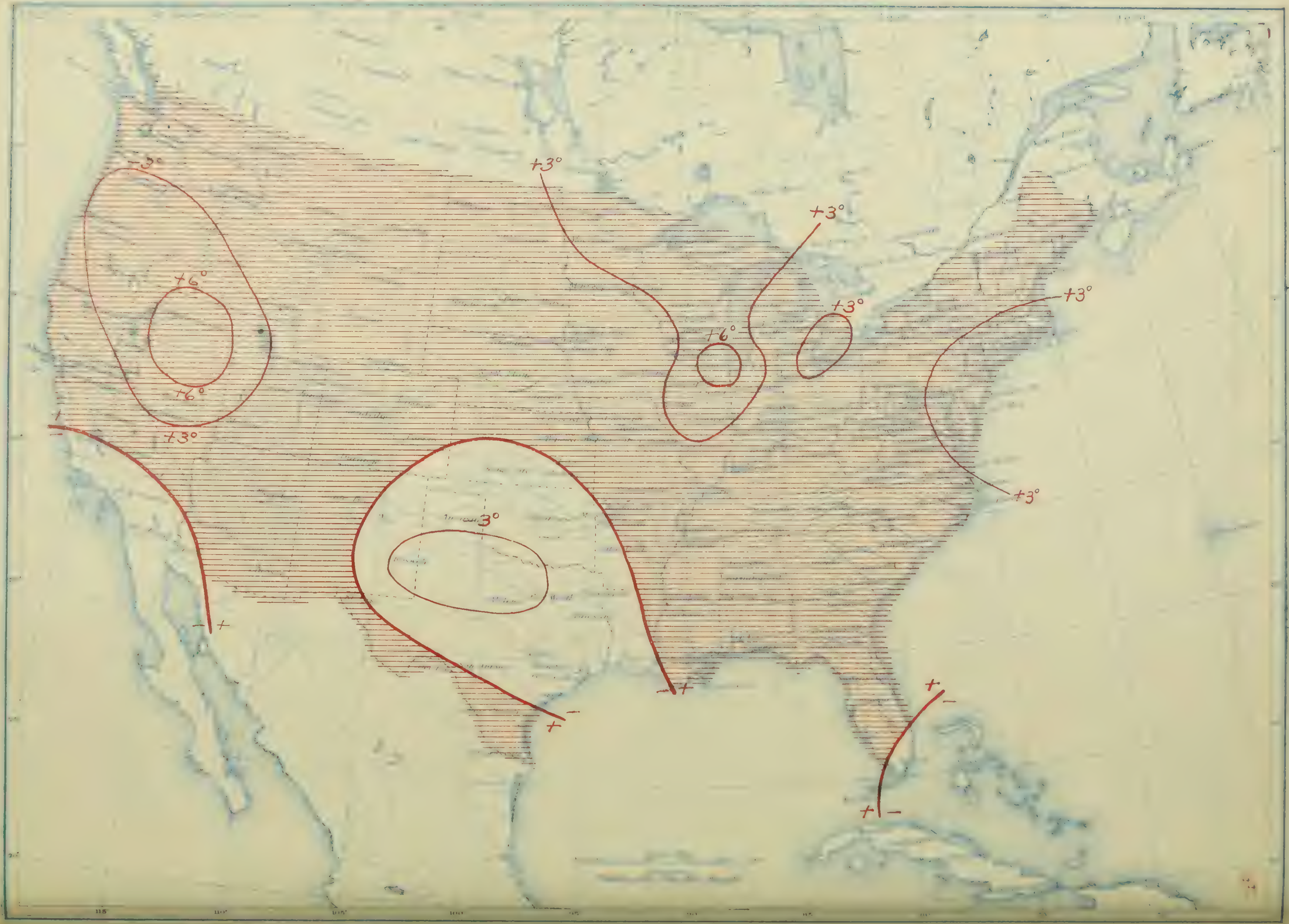
BY

GEORGE REEDER

SECTION DIRECTOR

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, May, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

Vol. XVIII. Columbia, Mo., May, 1914. No. 5

GENERAL SUMMARY.

May, 1914 was characterized by warm and dry weather, and much sunshine. The weather as a rule was favorable for farm work, but was too dry for normal vegetable growth. At the close of the month all vegetation was suffering for the want of moisture.

The average temperature for the State, 66.6°, was 2° above normal, and the third successive May with high temperatures and droughty conditions. It was warmer than the May of last year, with a mean of 65.8°, but was not as warm as the same month of 1912 and 1911, with means of 67.6 and 68.8°, respectively. The warmest May in the past two decades or more was that of 1896, with a mean of 70.1° or 5.7° above normal. The highest and lowest temperatures, 98° and 31°, respectively, are not remarkable by any means, as they are well within the limits of previous years; the maximum has been equalled or exceeded eight times in twenty years, the highest being 103°, in 1895, followed by 101° in 1911 and again in 1913. Lower temperatures than 31° have occurred in May 18 times in the past 30 years, the lowest during that period being 17°, in 1907.

The weather of the present month was controlled by three warm waves and three cool waves, but the former were about twice as long as the latter; and the excesses were more pronounced than the deficiencies.

The precipitation of the month was mostly in the form of local showers, and was markedly deficient in all divisions. With the exception of May, 1901, which received identically the same amount, 1.27 inches, it was the driest May in 47 years, or since the year 1867. The normal precipitation for May, covering 40 years or more, is 4.77 inches. During that period only three Mays have received less than 2 inches, i. e., 1901, 1911 and 1914, while at the same time 18 have received less than normal, five about normal, and the remainder may be classed as wet months.

The precipitation of the present month, following the deficiency of two preceding ones, was not sufficient for needs. A few counties in the extreme southwest, namely, McDonald, Barry, and Newton received amounts exceeding 4 inches, and one or two of the adjoining counties got somewhat less than that, while over the remainder of the State amounts ranged from less than to slightly over 2 inches. The most marked deficiencies occurred in the Missouri, Grand, Charitan and Osage watersheds, though they were hardly less pronounced in others.

Light frosts occurred on several dates during the first half of the month, but resulted in no material damage.

Thunder was heard on several dates, but as a rule the storms were local and moderate. There were, however, one or two exceptions. About 5.30 p. m., of the 3rd, Sturgeon, Boone County, was visited by an electric storm, accompanied by hail, which broke a number of windows, and damaged vegetation. During the night of the 4th a severe electric storm struck Springfield, Mo., and other nearby localities; several houses were struck by lightning, and several head of stock were killed. The loss is estimated at several thousand dollars.

During the afternoon of the 6th quite severe local thunderstorms occurred in northeast Missouri. In Lewis County, near the towns of Steffenville, Kirby, Hager's Grove and Rockwood the storm was accompanied by high wind and severe hail. The path of the hail was about three miles wide and several long. The stones, it was reported, ranged in size from that of the garden grape to as large as walnuts, and much damage was done to crops and other property that happened to lie in the storm's path. During the same afternoon a similar storm occurred in St. Louis and its vicinity, where damage was done to the amount of several hundred dollars, principally to windows and gardens. Lightning struck one or two houses, but fortunately no lives were lost.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 stations reporting, was 30.10 inches, or 0.16 inch above normal. The highest pressure was 30.42 inches, at St. Joseph and Kansas City on the 14th, and at St. Louis on the 20th, and the lowest was 29.57 inches at St. Joseph and Kansas City on the 4th. The greatest local range was 0.89 inch at St. Louis.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 70 stations, was 66.6°. The mean departure from the normal for 51 stations having 10 or more years record was plus 2.0°, which shows a larger excess than last year but not as large as in either 1912 or 1911. The mean temperature and the departure from normal for each division were as follows: northeast plain, 66.5°, or 2.1° above normal; southeast lowlands, 69.2° or 2.2° above normal; Ozark plateau, 66.5° or 1.3° above normal; southwest plain, 66.6° or 1.4° above normal; and northwest plateau, 66.0°, or 2.9° above normal. The highest temperature recorded was 98° at Grant City on the 26th, and the lowest was 31° at Cassville on the 9th, which gives a range of 67° for the State. The greatest local daily range was 50° at Doniphan on the 9th.

The average number of days with temperature 90° or above was 5 over the northeast plain; 8 in the southeast lowlands; 2 over the Ozark plateau; 2 in the southwest lowlands; 2 over the northwest plateau; and 4 for the State as a whole. The temperature was 32° or lower at one station only, on one day.

HUMIDITY.

At Columbia the average relative humidity, 7 a. m., was 74 per cent; at Hannical, 75 per cent; and at Kansas City, Springfield and St. Louis the averages of the 7 a. m. and 7 p. m. readings were 62, 67 and 56 per cent, respectively.

PRECIPITATION.

The average for the State, 80 stations reporting, was 1.47 inches. The departure from the normal for 64 stations having ten or more years of record was minus 3.40 inches which shows the largest deficiency in precipitation for any May of record. The monthly averages and departures for the five divisions of the State were as follows: northeast plain, 1.06 inches, deficiency 3.68 inches; southeast lowlands, 1.46 inches, deficiency 2.54 inches; Ozark plateau, 2.01 inches, deficiency 2.87 inches; southwest plain, 2.28 inches, deficiency 3.24 inches; and northwest plateau, 0.72 inch, deficiency 4.40 inches. The greatest local monthly precipitation was 4.71 inches, at Dean, McDonald County, and the least, 0.16 inch, at Wheatland, Hickory County. The greatest amount recorded in any 24 consecutive hours was 3.00 inches, at Fulton on the 11th.

The average number of days with 0.01 inch or more precipitation was 5, which is about 5 below the normal.

WIND.

The prevailing winds were from the south. The highest velocity recorded was 48 miles from the southwest at St. Louis on the 5th. The average hourly velocities at stations equipped with anemometers were as follows: Columbia, 7.6 miles; Hannibal, 8.8 miles; St. Louis, 13.4 miles; St. Joseph, 8.9 miles; Kansas City, 12.0 miles; Springfield, 9.5 miles; Cario, Ill., 7.9 miles; and Keokuk, Ia., 7.4 miles.

Continued on page 40.

Climatological data for May, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days				Prevailing direction of wind	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	.....	.....	.....	.....	.....	.....	.....	1.48	-3.99	0.60	0	5	24	2	5	sw.	C. Randecker.
Brunswick	Chariton	652	34	65.6	+1.9	90	25	41	9	43	0.73	1.24	0.26	0	8	18	4	9	s.	Louis Benecke.
Columbia	Boone	784	25	66.9	+2.4	91	26	40	9	38	1.37	-3.49	0.99	0	7	6	14	11	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	65.2	+1.0	88	24†	40	9	35	0.93	-3.76	0.38	0	4	14	8	9	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	65.8	+0.9	92	31	35	9	42	3.32	1.39	3.00	0	2	19c	6c	3c	.....	Russell Johnston.
Glasgow	Howard	618	36	.....	.....	.....	.....	.....	.....	.....	1.34	-3.28	1.32	0	2	23	1	7	e.	J. J. Shaughnessy.
Gorin	Scotland	700	28	.....	.....	.....	.....	.....	.....	.....	1.91	-2.55	0.55	0	6	12	12	7	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	66.7	+2.3	91	27	40	1	33	0.95	-4.65	0.44	0	5	18	10	3	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	40	.....	.....	.....	.....	.....	.....	.....	0.38	-3.93	0.16	0	6	14	9	8	s.	C. T. Mausund.
Jefferson City	Cole	628	33	65.8	+0.7	93	26	35	9	44	1.18	-3.21	0.46	0	6	24	0	7	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	.....	.....	.....	.....	.....	.....	.....	0.84	.....	0.28	0	5	.....	.....	.....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	37	64.8	+0.9	92	26†	33	1†	47	1.48	-2.99	0.85	0	5	20	10	1	se.	J. T. Farrell.
Macon	Macon	881	2	66.2	.....	91	27	41	8†	36	0.55	.....	0.23	0	6	16	7	8	sw.	John A. Cook.
Mexico	Audrain	797	37	66.0	+1.8	94	26	38	1	46	0.69	-4.16	0.38	0	6	19	3	9	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	68.2	+2.2	93	26	42	1†	37	1.09	-4.31	0.48	0	6	5	24	2	s.	E. L. Stines.
Palmyra	Marion	652	3	66.2	.....	93	21†	36	1	40	0.80	.....	0.32	0	5	18	11	2	se.	W. B. Hackell.
St. Catherine	Linn	914	1	66.1	.....	89	25	40	9	36	0.43	.....	0.19	0	4	16	20	1	sw.	L. D. Baker.
St. Charles	St. Charles	614	37	67.5	+6.1	91	25†	42	1†	32	1.49	-2.84	0.83	0	5	21	7	3	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	69.4	+2.9	92	27	44	1	25	0.69	-3.55	0.52	0	7	21	8	2	s.	U. S. Weather Bureau.
St. Louis(2)	do	578	3	68.9	.....	92	11	44	1	26	0.66	.....	0.38	0	8	21	8	2	s.	St. Louis University.
Steffenville	Lewis	576	21	67.8	+3.6	96	27	37	1	40	0.42	-1.86	0.27	0	3	13a	15a	2a	sw.	Frank Hall
Sublett‡‡	Adair	1,000	35	61.9	+2.3	92	26†	36	8†	40	0.50	-5.04	0.25	0	2	10	18	3	sw.	Lewis Spriggs.
Unionville	Putnam	1,072	22	62.8	0	90	25†	36	15	39	1.57	-3.88	0.60	0	6	13	1	11	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	68.2	.....	96	31	39	4	42	0.84	.....	0.45	0	3	15	7	9	s.	C. B. Ellis.
Warrenton	Warren	865	25	67.5	+2.9	93	26†	40	13	34	0.53	-4.38	0.18	0	7	16	8	7	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	.....	.....	.....	.....	.....	.....	.....	0.70	-2.95	0.60	0	2	25	5	1	s.	D. L. Albert.
Cardwell	Dunklin	..	3	69.5	.....	95	27	43	9	38	0.83	.....	0.68	0	2	26	4	1	s.	E. M. Perry.
Caruthersville	Pemiscott	...	23	71.1	+2.2	97	31	44	14	34	1.91	-2.21	1.31	0	3	25	4	2	e.	H. E. Averill.
Doniphan	Ripley	440	11	68.2	+1.6	93	31	39	9	50	1.12	-2.91	0.57	0	4	17	9	5	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	24	68.2	+2.8	95	31	40	1†	36	1.22	-3.06	1.07	0	2	14	9	8	s.	L. M. Pean.
Marble Hill	Bollinger	420	22	68.8	+2.9	93	26†	40	12	38	1.20	-3.18	1.20	0	1	26	5	0	w.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	.....	.....	.....	.....	.....	.....	.....	2.01	-2.31	1.41	0	4	18	2	11	se.	Miss Josie Smith.
Cairo, Ill	Alexander, Ill	359	43	69.2	+1.7	92	29	44	1	27	2.66	-1.17	2.54	0	4	14	11	6	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	25	.....	.....	.....	.....	.....	.....	.....	1.24	3.21	0.78	0	3	24	3	4	s.	G. V. Randolph.
Belle	Maries	1,000	23	66.8g	+1.7	90	26	39	10	36	1.70	-3.58	0.60	0	3	3g	19g	2g	s.	A. J. Wofford.
Birchtree	Shannon	1,200	21	66.4	+1.1	90	31	39	9	34	1.80	2.34	0.80	0	3	28a	0a	2a	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	67.4	+1.8	92	31	37	9†	43	2.75	2.66	0.87	0	10	18	12	1	sw.	T. H. B. Dunnegan.
Cassville	Barry	1,500	4	64.4	.....	88	31	31	9	47	4.21	.....	1.20	0	6	24	4	3	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	3	68.0	.....	93	25†	40	8†	37	1.55	.....	1.00	0	2	24	6	1	ne	Roy W. Reed.
Dean‡‡	McDonald	1,000	16	64.8	-1.4	88	26	31	13†	46	4.71	-1.39	1.81	0	7	20a	3a	7a	sw.	H. F. Dean.
Duncan	Webster	...	1	65.9	.....	95	29	36	9	38	1.45	.....	0.51	0	8	16	14	1	s.	C. A. Mingus.
Eldon	Miller	934	3	67.2	.....	91	26†	38	9†	41	1.18	.....	0.79	0	4	5	25	1	s.	Charles N. Kellogg.
Fruit City	Reynolds	1,150	1	66.0	.....	93	31	35	1	37	0.59	.....	0.30	0	4	24	7	0	sw.	R. C. Walton.
Gano‡‡	Dent	...	11	67.2	+1.4	93	26	37	15	40	0.23	4.16	0.19	0	2	25	5	1	s.	A. C. Leach.
Goodland	Iron	1,000	10	64.3	+0.9	93	31	31	9†	41	0.44	3.02	0.37	0	2	17	13	1	s.	F. M. Adams.
Hollister	Taney	1,000	5	67.0	.....	89	26	42	2†	46	1.55	.....	0.75	0	3	25	0	6	sw.	W. P. Chapmann
Houston	Texas	1,280	22	67.0	+2.2	91	31	35	9	41	0.24	-4.21	0.24	0	1	22	7	2	s.	P. F. Harmon.
Ironton	Iron	925	37	65.8	+1.2	94	26	34	9†	43	0.51	-4.42	0.30	0	3	6	21	4	s.	W. H. Delano.
Koshkonong	Oregon	911	14	69.4	+2.7	90	26†	42	1	30	3.78	-0.70	1.58	0	7	16b	11b	2b	s.	J. W. Pitt.
Lebanon	Laclede	1,105	26	67.4	+1.6	92	31	37	14	38	1.89	-4.19	0.60	0	4	14	8	9	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	65.6h	.....	87	10†	38	13	34	3.00	1.61	1.03	0	8	9h	8h	6h	se.	C. S. Crow.
Mountain Grove	Wright	1,490	16	66.0	+1.7	89	26	38	9†	35	1.25	-3.03	0.52	0	5	15	12	4	se.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	35	66.0	-0.1	87	31	36	13†	31	3.77	-1.95	2.10	0	4	13b	9b	7b	sw.	J. R. White & Son.
Neosho	Newton	1,083	32	66.4	+0.2	89	26†	35	14	40	4.08	-2.09	1.20	0	13	16	9	6	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	67.8	+3.4	93	26	39	9	38	0.83	4.27	0.28	0	3	27	3	1	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	65.6	+1.0	87	31	40	13	33	3.55	-2.00	1.54	0	6	13	14	4	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	20	.....	.....	.....	.....	.....	.....	.....	0.16	-5.60	0.16	0	1	19a	11a	0a	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	66.6	.....	91	26	38	14	41	2.84	.....	0.63	0	9	14	8	9	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	22	64.4	0.9	92	23	35	13	34	2.18	4.05	0.95	0	4	4a	21a	5a	n.	Mark Brown.
Clinton	Henry	800	28	66.2	.....	91	26	37	9	44	2.95	-2.71	1.75	0	8	17	13	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	65.6	+1.8	91	31	40	14	39	2.14	-2.56	0.72	0	9	9	3	19	sw.	A. J. Sharp.
Joplin	Jasper	975	36	.....	.....	.....	.....	43	8	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Joplin High School.
Lamar	Barton	964	35	66.2	+0.5	89	26†	37	13	45	1.93	-3.77	0.81	0	8	15	3	13	s.	I. H. Adams.
Lamonte	Pettis	863	25	67.2	.....	91	25†	35	14	37	1.90	-3.55	0.47	0	7	10	18	3	sw.	J. Ed. Hall.
Marshall	Saline	779	21	66.0	+1.8	90	25†	37	12	41	1.49	-3.51	0.80	0	6	13a	11a	6a	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	67.9	.....	87	26	42	13	26	3.07	-2.61	0.62	0	9	8	20	3	sw.	C. Jewell.
Osceola	St. Clair	738	16	.....	.....	.....	.....	.....	.....	.....	2.52	-3.63	0.94	0	9	17a	7a	6a	sw.	W. E. Matthews.
Warrensburg	Johnson	883	25	68.0	+2.6	93	26†	40	13	37	1.51	-3.39	0.44	0	8	14	13	1	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	68.4	+2.5	95	31	34	9	48	2.54	-2.61	1.01	0	11	13	17	1	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	.....	27	67.2	+3.1	91	31	40	8†	37	0.55	-4.78	0.40	0	3	19	11	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Skinner.
Conception	Nodaway	982	31	64.5	+3.4	90	26	38	12	37	0.91	-3.90	0.43	0	4	8	19	4	sw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	22	65.1	+3.1	98	26	35	9	45	0.34	-4.64	0.34	0	1	26	1	4	nw.	W. H. Campbell.
Kansas City	Jackson	963	26	66.8	+2.3	88	26	42	12	38	0.70	-4.41	0.20	0	8	8	20	3	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	23	66.5	+3.5	90	26†	42	12†	31	1.02	-4.86	0.75	0	6	17	5	9	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	66.8	+2.8	90	26	41	14	33	0.62	-4.43	0.38	0	6	19	0	12	s.	J. W. Keithley.
Liberty	Clay	864	26	67.7	+3.7	92	26	39	13	41	0.95	-4.51	0.33	0	6	17	12	2	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	65.1	+2.9	96	26	36	13	45	0.64	-4.66	0.15	0	9	20	0	11	s.	E. R. Brink.
Oregon	Holt	1,113	59	61.6	+1.3	88	25†	36	13	35	1.16	-3.68	0.43	0	8	18	9	4	s.	Tom Curry.
Pattonsburg	Daviess	.....	5	.....	.....	.....	.....	.....	.....	.....	0.71	.....	0.26	0	5	21	0	10	sw.	William Burton.
St. Joseph	Buchanan	825	43	66.2	.....	92	26	40	14	39	0.57	-3.82	0.27	0	5	13	12	6	s.	U. S. Weather Bureau
Tarkio	Atchison		2	64.1	.....	90	25†	36	13	37	0.62	.....	0.40	0	5	8	18	5	sw.	John F. Frazier
Trenton	Grundy	812	20	66.8	+2.9	91	26	40	12	41	0.57	-4.73	0.38	0	4	19	6	6	s.	W. H. Estes.
State means and extremes		...	...	66.6	+2.0	98	26	31	9	50	1.17	-3.40	3.00	0	5	17	9	5	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for May, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
Boonville	Missouri				.60	.09							60																.11		.08		1.48
Brunswick	Grand				.10	.15					.09	.02	.04								.03								.04		.26		0.73
Columbia***	Missouri			.01	.01	.02	T.					.97	.02							T.			T.				T.		.30	.04			1.37
Fayette	......do				.48	.05						.25										T.						T.		.15			0.93
Fulton	......do											3.00																.32					3.32
Glasgow	......do				1.32								T.	.02																T.			1.34
Gorin	Mississippi			.54		.28		.23					.55															.02		.24			1.91
Hannibal***	......do			T.	.07	T.		.03		T.		.35	.09									T.						T.	.41	T.			0.95
Hermann	Missouri			.08			.02			T.			.16										.01					T.		.10	.01		0.38
Jefferson City	......do												.46	02														.45	.06	.15	.04		1.18
Keytesville	Chariton			.18			.15				.15	.08																		.28			0.84
Louisiana	Mississippi			.02		.85		.03					.18										T.						.40			T.	1.48
Macon	Chariton			T.	.07			.05					.03															.10	.07	.23			0.55
Mexico	Mississippi				.05	.02			T.		T.	.02	.38	T.									.02					T.		.20			0.69
eld	Meramec			T.		.13	.07						.01														.38		.02	.48			1.09
Palmyra	Mississippi					.09			.02				.32																	.30	.07		0.80
St. Catherine	Grand			T.	T.	.18		.03					T.							T.	T.	T.						.03		T.		.19	0.43
St. Charles	Missouri			T.		.12							.04										T.		T.			.04	.83	.46			1.49
St. Louis (1)***	Mississippi			.02	.10	.42			T.				.02										T.		.01				.09	.03			0.69
St. Louis (2)	......do			.02	T.	.07	.38					.02	.02												.03				.02	.10			0.66
enville	......do			.05	.10			T.					T.									T.								.27			0.42
blett	......do			.25																										.25			0.50
sville	Grand			T.	50	60		.16	T.				.05	T.							T.		.06						.60				1.97
Vandalia	Mississippi			.45	.27	T.							.12																T.	T.			0.84
Warrenton	......do			.01			.18						.08															.04	.10	.11	.01		0.53
Southeast Lowlands.																																	
Cape Girardeau	Mississippi					.60	.10																										0.70
Cardwell	......do				.68		.15						T.										T.										0.83
Caruthersville	......do			T.	1 31	.30	.30	T.															T.										1.91
Doniphan	Black			.10	.57	.40	.05				T.																T.	T.	T.				1.12
Jackson	Mississippi				1.07			.15																								T.	1.22
Marble Hill	......do				1.20																												1.20
New Madrid	......do				.02	1.44			.25															.30									2.01
Cairo, Ill.***	......do			T.	1.56	.98	.02	.10	T.																T.					T.			2.66
Ozark Plateau.																																	
Arlington	Gasconade					.78	T.						.38																		.08		1.24
Bagnell	Osage																																
ile	Meramec											.50											T.						.60	.60			1.70
Birch tree	Black				.40	.80	.60																										1.80
Bolivar	Osage		.08			.77							.87							.10				.15			.03	.15	.03	34	.23		2 75
Cassville	White		.08		.53	T.							1.20				T.							.82			.74	.84		T.		T.	4.21
Crocker	Gasconade					.55							1.00																				1.55
ean	Neosho		.25		1.25	02							1.04							.27								1.81			07		4.71
ncan	Osage		.01		.01	51					T.		.47														.08	.15	.05		T.	.17	1.45
Eldon	......do			T.		.24							.70															.04	T.	.20			1.18
uit City	Black				.30	.12	.10																.07										0.59
ano	Meramec					.04							.19												T.		T.		T.				0.23
oodland	Black												.07																			.37	0.44
Hollister	White				.70	.10							.75																				1.55
Houston	Gasconade				T.	T.							.24										T.				T.				T.	T.	0.24
Ironton	Mississippi			T.	T.	.15	.06	T.	T.		T.		T.	T.														T.	T.			.30	0 51
Koshkonong	Black				1.16	1.58	.18						.07										.46				.03				.30		3.78
Lebanon	Osage					.40							.60															.52	.37				1 89
Lockwood	......do		.11		.18	.03							89						.18								1.03	.24				.34	3.00
Mountain Grove	White				T	.06							.43														.05	.19			.52		1.25
Mount Vernon	Neosho				2.10							.85								T.				T.			.11	.71		T.			3.77
Neosho	......do		.25		1.04	.44	T.						1.20				.02			.16	.02		.25	T.	.02		.08	.35	.15	.10		T.	4.08
Rolla	Meramec					.28	T.						28																27				0.83
Springfield***	White		.02		1.54							.68	T.							T.				.88			.24	.19	T	T.	T.		3.55
Wheatland	Osage				.16																												0.16
Southwest Plain.																																	
Amoret	Osage		.27	.63	.26							.23	.32									.35		.05				.26		.47		T.	2.84
Appleton City	......do		.33															.44					.46					.95					2.18
Clinton	......do		.10		20								1 75							.10		.20	.10					.15		.35			2.95
Harrisonville	......do			.26	14								.72							.05	.39	.03	.47						T.	.04	.04		2.14
Joplin	Neosho		.38		12	.31							.91																				
Lamar	......do			.26	T.	T.						T.	.81					T.		.24	.06		.16					.28	.07	T.	.05		1.93
Lamonte	Missouri			.15	.30	.33	T.						.47							.15		T.						.10		T.		.40	1.90
Marshall	......do		T.	.05	.31	.80				T.			.20							.04	T.							T.		.09			1.49
Nevada	Osage		.15		.02								.62							.61			.59					.17	.12		.31	.48	3.07
Osceola	......do							.08					.94							.07	03		.08					.15	.22	.24	.71		2.52
Warrensburg	Missouri		.09	.06	.16	.44	T.						.39							T.		.10	T.					.05		.22			1.51
Warsaw	Osage		T	.06	.37	.27							1.01							.18	T.	.05		.03	T.		.38	.06	.03	.10			2.54
Northwest Plateau.																																	
Avalon	Grand			.05		.40																								.10			0.55
Bethany	......do																																
Conception	Missouri		T.			T.		.11												.12		.25	.43					T.	T.	T.		T.	0.91
Grant City	Grand		T.			T.	T.	T.		T		T.								.34	T.								T.	T.	T.	T.	0.34
Kansas City***	Missouri		.19	.01	.08							.11	T.							.20		.04						.05				.02	0.70
Kidder	Grand					.75														.04	.10	.04								.05	.04		1.02
Lexington	Missouri			T.	.09	38														.02	.03		.05							T.	.05		0.62
Liberty	......do		.08	T.	T.	33						T.								.28		.05						T.	.11	T.		.10	0.95
Maryville	......do			.02		.08		.15												.08	.10	.12	.03						.03	.03			0.64
Oregon	......do		.10			.03		.10												.14		.13		.43				.19	.04				1.16
Pattonsburg	Grand			T.		.15															.26	.17	.07						.06				0.71
St. Joseph***	Missouri		.06		.01	T.	T.													.10		.11		T.				.27					0.55
Tarkio	......do				.40	.02		.03												.12										.05			0.62
Trenton	Grand			T.	.38		.07												T.	T.	T.	.06						T.	.06			T.	0.57

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at that time of observation.

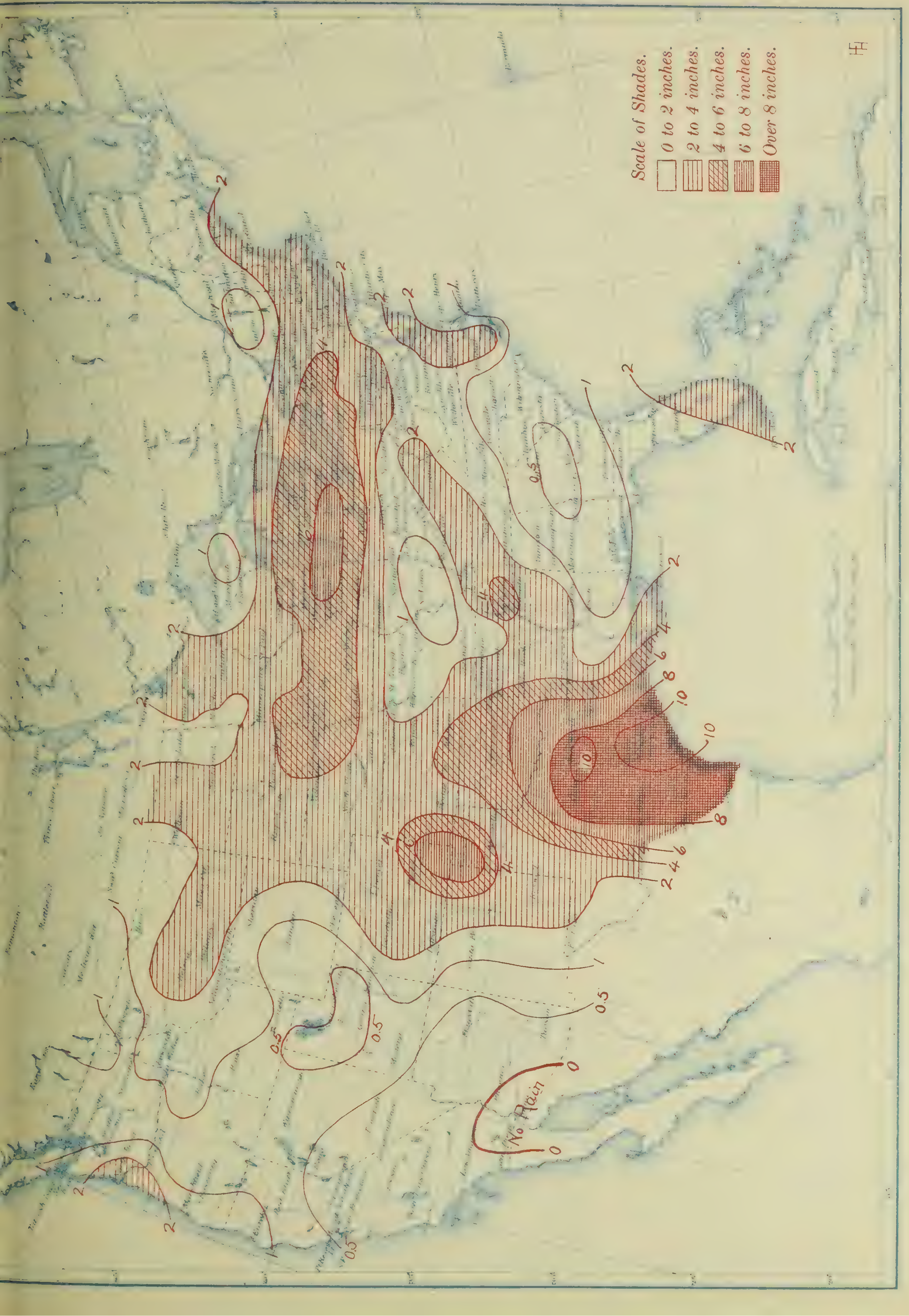
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Daily temperatures for May, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	64	72	79	78	78	71	58	66	77	85	83	62	66	71	75	75	76	77	75	82	77	82	86	89	90	89	87	88	73	83	88	77.5
	Minimum	46	46	48	59	56	43	47	42	41	42	68	44	43	42	42	44	50	52	53	61	61	59	57	58	69	72	65	67	72	58	54	53.7
Columbia	Maximum	64	73	80	77	82	72	62	65	78	87	90	61	63	69	71	73	74	76	80	82	81	81	86	88	91	91	88	88	77	86	84	[illegible]
	Minimum	43	49	59	63	58	47	47	43	40	62	60	43	43	40	42	48	53	53	61	58	62	62	56	67	68	70	70	68	66	61	65	[illegible]
Fayette	Maximum	62	70	77	73	77	70	58	63	75	85	84	55	62	68	72	72	75	76	78	80	78	80	84	88	88	88	88	87	71	84	87	[illegible]
	Minimum	42	47	58	58	55	47	46	41	40	59	55	42	43	45	41	48	48	52	60	60	59	62	54	67	65	67	70	[illegible]	64	58	62	54.4
Hannibal	Maximum	63	69	82	76	83	70	63	63	73	85	89	61	64	69	70	72	74	77	83	82	83	79	84	[illegible]	90	90	71	[illegible]	74	[illegible]	[illegible]	[illegible]
	Minimum	40	48	58	64	58	51	47	43	41	62	61	41	46	44	42	46	51	51	60	59	64	58	52	70	72	73	71	68	66	58	57	55.5
Jefferson City §§	Maximum	69	75	86	80	86	74	67	65	79	89	92	48	63	72	75	77	77	79	83	85	86	83	92	92	92	93	90	87	84	89	92	[illegible]
	Minimum	40	42	45	50	53	47	50	39	35	49	63	43	39	40	36	45	46	48	55	54	57	60	51	61	65	66	64	63	64	62	63	51.3
Macon	Maximum	65	69	78	78	79	69	61	64	74	81	85	77	65	70	74	75	77	77	78	81	79	81	85	88	89	88	91	88	77	82	88	[illegible]
	Minimum	43	45	55	59	57	43	47	41	41	62	67	41	45	42	44	43	45	47	57	62	61	58	53	64	70	73	68	64	69	64	67	[illegible]
Mexico §§	Maximum	64	71	82	80	87	73	67	67	78	88	92	46	66	71	73	73	75	78	84	85	85	82	87	92	92	94	93	90	82	87	93	[illegible]
	Minimum	38	40	47	59	58	45	46	41	39	42	63	44	41	42	40	43	45	50	52	55	56	60	52	57	69	69	70	67	66	59	61	52.1
Oakfield	Maximum	64	69	80	74	87	76	73	64	75	88	91	82	66	71	73	73	76	78	83	83	86	82	86	90	92	93	91	89	90	[illegible]	92	80.6
	Minimum	42	48	55	65	58	49	49	42	42	60	65	45	43	43	44	48	51	52	60	56	58	64	58	66	67	69	68	69	65	63	65	[illegible]
St. Catherine	Maximum	63	67	76	77	77	67	62	63	72	82	82	77	64	68	71	72	74	77	73	77	77	80	83	85	89	88	87	86	79	81	86	[illegible]
	Minimum	43	48	58	60	55	46	49	41	40	60	68	41	46	43	43	46	50	53	61	60	61	72	56	62	68	72	69	67	75	53	63	55.9
St. Louis (1)	Maximum	64	70	79	74	85	73	72	63	74	87	91	70	67	70	72	73	74	78	81	82	84	82	84	88	90	90	92	88	[illegible]	85	90	[illegible]
	Minimum	44	51	55	64	60	55	50	45	49	64	67	45	45	51	55	50	51	57	60	62	64	64	64	65	70	74	74	73	73	66	70	59.4
Sublett	Maximum	64	67	77	80	79	68	62	64	73	84	84	79	64	70	71	74	75	79	75	81	80	79	85	90	81	92	92	[illegible]	77	85	[illegible]	[illegible]
	Minimum	42	45	54	54	53	40	43	36	36	64	69	39	45	38	38	40	45	47	57	58	60	52	53	63	69	68	72	64	64	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum	64	70	76	80	74	68	55	60	72	85	82	56	62	70	72	74	76	78	72	80	75	78	82	88	90	88	90	88	76	84	86	[illegible]
	Minimum	41	43	50	55	52	39	42	40	41	46	62	40	38	40	36	40	42	45	50	56	58	52	53	56	65	66	67	64	66	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	66	71	82	76	87	75	69	65	77	89	92	47	68	71	73	75	76	80	84	85	87	82	88	90	92	93	92	90	86	88	93	[illegible]
	Minimum	42	45	51	62	58	49	53	41	43	58	65	46	40	41	47	46	47	49	55	52	58	64	58	62	66	68	68	67	66	62	62	54.7
Southeast Lowlands.																																	
Cardwell	Maximum	68	78	80	72	86	81	80	73	76	86	88	78	65	72	76	77	71	77	86	82	88	89	90	93	93	94	95	93	93	90	89	82.5
	Minimum	[illegible]	46	54	63	60	60	55	49	43	52	52	60	48	44	41	50	53	56	53	50	50	56	64	66	66	68	64	66	68	70	68	56.5
Caruthersville	Maximum	70	76	78	75	83	76	79	71	75	86	89	83	63	76	78	80	75	80	81	85	89	91	90	95	93	95	95	93	95	91	97	[illegible]
	Minimum	46	51	57	63	62	62	68	48	45	56	66	63	49	44	45	51	59	56	58	54	58	57	65	65	63	68	68	68	69	71	70	[illegible]
Doniphan	Maximum	72	74	77	71	88	83	80	68	89	....	88	82	69	73	76	....	75	75	79	84	86	87	88	91	91	92	92	90	91	89	93	82.6
	Minimum	43	45	54	62	58	59	50	46	39	....	64	51	46	43	41	....	52	51	49	46	49	54	61	58	58	65	65	66	63	63	63	[illegible]
Jackson	Maximum	69	74	80	74	87	78	77	65	72	84	84	79	56	71	76	78	80	81	82	84	86	85	89	90	91	93	94	96	94	92	95	[illegible]
	Minimum	40	46	56	65	60	58	53	45	42	58	65	[illegible]	46	42	40	45	55	50	53	49	51	56	55	58	66	67	61	68	65	68	64	54.7
Marble Hill	Maximum	69	74	80	82	86	77	76	66	72	83	90	78	82	84	84	87	86	84	80	83	84	85	85	88	90	93	92	93	93	91	93	[illegible]
	Minimum	50	52	60	60	61	52	49	46	52	59	64	40	46	47	45	50	51	47	43	49	46	47	52	56	61	64	65	64	62	63	68	54.0
Ozark Plateau.																																	
Birchtree	Maximum	77	72	77	73	84	70	68	68	73	82	82	75	65	70	71	73	76	73	75	78	80	82	83	86	87	[illegible]	85	85	....	87	[illegible]	77.9
	Minimum	43	47	57	60	58	54	51	43	39	56	68	47	43	54	44	53	53	52	56	52	53	56	58	63	65	68	66	65		64	63	[illegible]
Cassville	Maximum	70	72	80	73	87	74	72	65	78	85	86	70	61	65	71	70	72	74	71	83	80	86	85	83	85	[illegible]	83	85	87	85	88	77.9
	Minimum	44	40	43	57	48	51	44	38	31	60	67	44	37	33	36	52	50	45	59	51	46	58	54	58	53	64	62	62	66	61	71	50.9
Duncan	Maximum	67	72	81	73	81	74	69	63	74	85	87	76	66	67	77	73	73	73	77	83	84	77	87	87	89	88	84	85	95	88	89	78.6
	Minimum	53	48	57	60	55	51	50	41	36	54	52	44	42	38	44	50	46	50	59	52	55	59	52	60	61	63	65	63	63	59	67	53.2
Eldon	Maximum	70	75	81	78	86	75	66	65	79	85	90	69	62	70	75	74	77	77	79	83	84	85	87	89	90	91	87	87	86	87	91	[illegible]
	Minimum	43	47	60	62	55	44	46	40	38	58	69	43	38	41	43	50	47	47	58	59	59	62	53	64	64	68	69	64	66	63	62	54.3
Fruit City	Maximum	62	74	77	70	86	80	75	72	73	81	87	79	66	69	73	75	76	75	78	82	82	82	84	81	87	[illegible]	88	88	[illegible]	88	93	[illegible]
	Minimum	35	46	60	54	58	48	45	51	45	60	70	48	45	45	44	43	58	44	50	55	49	[illegible]	57	56	[illegible]	60	66	56	56	57	[illegible]	52.5
Gano	Maximum	70	76	78	80	88	76	72	64	78	87	90	78	63	69	75	77	75	77	82	86	87	81	88	89	91	93	91	89	90	88	91	81.3
	Minimum	42	44	52	58	57	51	52	41	38	58	67	44	41	42	37	48	45	48	52	49	56	60	53	64	62	64	67	65	68	62	61	53.2
Hollister	Maximum	72	74	82	70	82	72	72	65	88	88	72	70	72	76	72	70	74	72	76	82	84	81	86	88	86	89	88	84	88	88	86	79.1
	Minimum	44	42	46	48	50	48	52	46	42	58	56	52	46	42	50	52	54	52	54	52	62	68	64	66	64	62	66	64	66	64	66	54.8
Ironton §§	Maximum	70	73	80	72	87	76	75	65	76	86	96	65	68	72	76	76	77	78	82	84	85	85	86	89	92	94	92	91	93	92	[illegible]	[illegible]
	Minimum	43	39	55	55	60	55	46	44	34	59	58	61	44	37	34	41	39	43	44	41	45	45	46	62	55	62	62	59	61	64	58	[illegible]
Lebanon	Maximum	72	78	80	73	87	76	70	68	77	86	87	67	63	71	76	76	78	77	78	82	85	84	88	89	[illegible]	89	86	85	88	90	92	[illegible]
	Minimum	42	54	68	62	55	54	50	40	39	55	67	44	40	37	40	52	49	50	60	54	50	61	52	65	64	67	66	65	[illegible]	[illegible]	61	54.6
Mountain Grove	Maximum	70	71	76	71	84	80	70	61	72	71	86	80	67	66	72	71	73	76	78	80	83	80	83	86	87	89	84	[illegible]	87	[illegible]	87	[illegible]
	Minimum	50	50	45	60	51	51	55	42	38	42	63	45	43	38	48	52	51	50	51	60	57	57	62	65	66	65	67	65	67	64	66	[illegible]
Neosho	Maximum	72	75	[illegible]	80	83	78	67	65	79	87	85	82	61	66	72	71	75	78	74	81	82	82	85	85	87	89	86	[illegible]	84	88	80	[illegible]
	Minimum	45	46	57	57	50	48	47	41	39	64	69	44	36	35	39	52	53	48	59	50	57	61	56	65	66	65	64	62	63	[illegible]	[illegible]	53.4
Rolla	Maximum	72	71	80	75	87	79	70	73	77	86	92	79	61	70	75	[illegible]	77	78	[illegible]	83	87	84	88	89	[illegible]	93	96	87	89	88	93	81.2
	Minimum	42	46	58	64	56	49	42	41	39	58	76	44	46	42	41	46	48	49	55	53	62	64	60	55	68	67	65	66	68	65	63	[illegible]
Springfield	Maximum	68	70	79	69	81	71	64	59	76	86	83	60	55	64	70	68	71	71	74	77	79	77	81	83	84	83	80	82	83	85	87	74.9
	Minimum	45	52	59	56	56	52	47	41	43	59	60	40	40	44	51	54	57	52	62	57	62	61	62	65	66	69	68	68	67	65	68	56.3
Southwest Plain.																																	
Amoret	Maximum	69	70	82	78	77	73	68	66	82	88	88	73	67	74	74	72	78	79	78	84	85	83	84	83	89	91	82	86	86	86	85	79.4
	Minimum	41	47	54	58	58	45	50	40	41	57	66	41	40	38	46	52	52	50	58	59	61	57	59	60	57	68	65	65	57	61	[illegible]	[illegible]
Clinton	Maximum	71	70	80	80	83	74	69	62	81	81	87	75	69	75	77	76	85	80	73	82	81	86	76	82	89	91	85	87	75	86	88	[illegible]
	Minimum	42	40	49	60	57	44	50	40	37	55	67	43	40	40	60	46	60	53	58	58	52	50	55	71	59	61	65	76	65	61	66	53.6
Harrisonville §§	Maximum	67	70	80	79	75	73	62	64	81	85	84	51	65	70	74	72	76	78	71	81	71	80	87	87	87	89	86	87	75	85	91	76.9
	Minimum	43	47	50	60	57	48	50	41	42	48	63	43	41	43	42	52	50	53	57	59	60	62	57	65	67	76	67	65	68	60	62	54.4
Lamar §§	Maximum	71	71	82	75	83	72	67	66	81	88	83	50	62	68	72	73	76	78	75	82	82	82	88	87	88	89	85	87	79	88	89	78.0
	Minimum	45	45	56	59	56	48	49	40	43	45	68	43	37	39	46	55	55	49	44	59	59	61	59	62	67	67	65	67	68	64	65	54.3
Lamonte	Maximum	66	69	71	78	76	73	64	72	74	85	81	86	65	70	73	73	76	77	71	82	84	85	87	90	91	91	86	85	75	88	91	78.5
	Minimum	48	53	56	58	56	43	53	36	58	60	65	43	43	35	38	49	48	48	59	66	59	61	65	69	72	72	67	66	65	65	65	[illegible]
Marshall	Maximum	65	72	78	78	79	70	65	65	76	84	83	78	67	73	76	76	75	77	73	80	76	83	86	88	90	89	88	88	....	82	90	[illegible]
	Minimum	47	46	55	58	58	43	51	41	38	59	67	37	45	46	41	46	46	47	57	60	54	61	52	65	67	58	65	65	....	69	[illegible]	[illegible]
Warrensburg	Maximum	66	71	81	81	77	73	65	66	80	87	82	79	67	71	76	75	79	81	70	83	81	85	90	85	91	93	87	90	83	89	92	80.1
	Minimum	45	49	58	62	57	46	52	42	46	61	70	42	40	42	46	52	54	56	54	56	59	54	56	65	67	69	67	67	69	65	[illegible]	[illegible]
Warsaw	Maximum	68	76	85	82	84	73	68	69	82	89	90	82	65	69	75	76	79	79	75	85	89	86	92	96	93	94	88	94	79	96	95	82.0
	Minimum	42	50	55	46	57	42	50	43	31	57	72	42	37	38	38	59	64	57	58	57	62	60	64	64	67	70	65	63	62	64	[illegible]	[illegible]
Northwest Plateau.																																	
Avalon	Maximum	66	70	79	81	76	73	65	67	76	85	84	79	68	71	77	76	77	78	72	82	79	85	87	88	89	90	88	88	82	89	91	79.4
	Minimum	41	48	58	59	57	45	50	40	42	62	67	42	46	40	44	46	49	50	60	60	62	61	56	65	66	66	69	66	66	53	66	55.1
Grant City	Maximum	56	64	69	81	66	74	62	62	80	87	84	52	60	72	78	74	78	79	71	83	82	81	89	92	94	98	89	90	79	86	95	77.6
	Minimum	44	48	55	56	53	41	45	40	35	55	49	38	40	38	44	47	49	52	59	60	62	55	56	65	65	68	65	66	67	50	63	52.6
Kansas City	Maximum	65	69	81	78	72	72	61	64	79	84	86	52	65	70	71	70	74	75	70	83	76	79	85	85	85	83	84	84	77	84	88	75.9
	Minimum	46	55	57	63	58	50	50	45	49	62	48	42	45	43	50	57	56	56	61	62	66	63	64	69	70	72	70	69	67	66	69	57.7
[illegible] §§	Maximum	61	68	78	84	70	68	57	63	75	85	85	49	65	70	74	72	75	77	70	78	76	80	84	85	88	90	87	83	74	[illegible]	[illegible]	75.6
	Minimum	45	54	[illegible]	61	59	43	48	43	44	66	70	42	42	46	51	53	47	52	60	59	62	58	60	68	70	72	74	71	70	58	74	57.1
Lexington §§	Maximum	[illegible]	73	[illegible]	80	79	71	60	66	78	86	86	52	67	72	75	75	77	77	69	81	78	84	87	88	88	90	88	80	80	85	85	[illegible]
	Minimum	47	50	56	56	58	43	52	42	45	62	71	43	42	41	42	52	49	51	60	61	61	61	59	60	70	72	67	66	71	57	62	[illegible]
Maryville §§	Maximum	65	79	80	85	69	73	61	67	80	90	88	54	66	75	76	75	80	81	69	83	81	83	90	91	92	96	90	91	77	88	97	79.6
	Minimum	45	45	56	57	55	41	43	38	41	45	60	37	36	40	41	45	48	48	52	58	62	56	57	60	60	60	61	61	60	45	60	[illegible]
Oregon	Maximum	62	[illegible]	76	80	73	70	56	62	78	86	82	51	64	65	75	72	76	77	71	80	75	82	81	85	88	88	83	82	76	81	87	75.5
	Minimum	41	51	56	58	56	42	41	39	43	58	49	39	36	37	42	50	53	52	60	61	63	54	59	67	69	68	67	67	60	53	64	53.6
St. Joseph	Maximum	65	68	78	82	70	72	57	64	80	89	85	53	64	71	73	73	76	77	71	81	76	82	86	87	88	92	82	84	78	85	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	58	61	55	42	48	43	48	62	46	40	40	40	40	52	55	54	61	62	64	61	62	70	72	72	69	68	62	57	67	55.8
Trenton	Maximum	62	68	78	80	76	79	77	62	74	82	82	81	63	68	71	72	75	75	75	81	79	78	85	86	89	91	90	87	86	81	85	78.1
	Minimum	45	49	50	59	56	45	49	41	43	62	66	40	45	41	43	48	51	53	61	61	64	65	59	68	68	70	65	68	59	52	65	55.4

[illegible] indicate, respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
0
0.5
1
2
4
6
8
10

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 74, or about 7 per cent above normal; at Kansas City the percentage of the possible was 76; Springfield, 62; St. Louis, 79; and at St. Joseph, 69. For the State, the average number of clear days was 17, partly cloudy 9, and cloudy, 5.

MISCELLANEOUS PHENOMENA.

Hail—3rd, 4th, 5th, 7th, 26th and 29th.

Light Frosts—6th, 7th, 8th, 9th, 12th, 13th and 14th.

Thunderstorms—3rd, 4th, 5th, 6th, 9th, 10th, 12th, 26th, 28th and 29th.

COMPARATIVE DATA FOR MAY

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	62.1	−2.3	93	30	5.35	+0.58	......	5
1889	63.5	−0.9	96	28	6.56	+1.79	......	5
1890	62.8	−1.6	96	32	3.47	−1.30	......	6
1891	61.5	−2.9	97	28	4.26	−0.51	......	8
1892	60.7	−3.7	91	28	7.80	+3.03	3.90	17
1893	61.8	−2.6	94	30	5.89	+1.12	5.83	10
1894	63.7	−0.7	95	22	3.99	−0.78	4.20	8
1895	64.6	+0.2	103	28	4.08	−0.69	3.43	9
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	12
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	7
1898	65.2	+0.8	97	31	7.90	+3.13	5.50	14
1899	66.9	+2.5	96	34	6.26	+1.49	5.28	12
1900	66.3	+1.9	97	29	3.69	−1.06	4.00	10
1901	63.8	−0.6	98	30	1.47	−3.30	3.04	6
1902	69.4	+5.0	98	39	5.03	+0.26	4.35	11
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	15
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	12
1905	64.9	+0.5	94	34	4.87	+0.10	4.55	10
1906	66.3	+1.9	98	27	2.16	−2.61	3.83	7
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	10
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	12
1909	63.3	−1.1	96	23	5.34	+0.57	5.26	9
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	13
1911	68.8	+4.4	101	27	1.55	−3.22	2.06	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	7
1913	65.8	+1.3	101	33	3.05	−1.93	2.95	8
1914	66.6	+2.0	98	31	1.47	−3.40	3.00	5

ERRATA FOR APRIL, 1914.

Avalon—Mean monthly temperature, page 28, should be 54.2°.

Marshall—The total precipitation, pages 28 and 29, should be 2.53 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

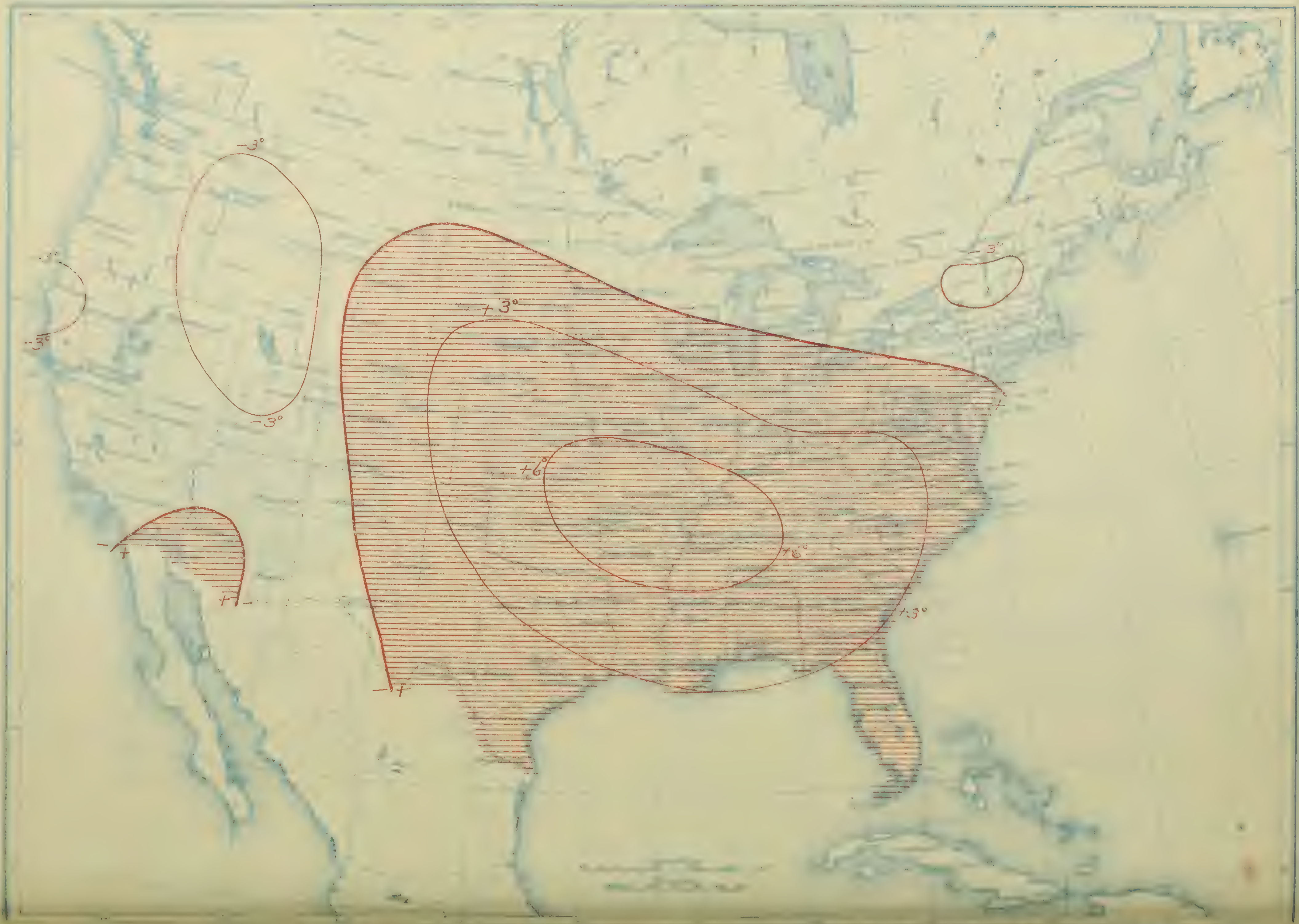
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JUNE, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

ST. LOUIS, MO.
WEATHER BUREAU OFFICE

Departure of the Mean Temperature from the Normal, June, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

l. XVIII. COLUMBIA, MO., JUNE, 1914. No. 6

GENERAL SUMMARY.

June, 1914, was hot and comparatively dry, with a high rcentage of sunshine. While the month was favorable for rvesting and most other outdoor occupations, except for the tense heat, it was rather unfavorable for good vegetable growth, a rule.

It was an unusually warm month, the mean temperature r the State, 79.3 degrees, being the highest for any June in 27 ars. The maximum temperature, however, although as high 106 degrees, did not equal the records of former years, which ay be seen by consulting the comparative table at the bottom this page. It also may be noted that of 27 Junes, a maxi-um temperature of 100 degrees or over has occurred in 20 of em.

The heat was uniformly distributed, and it was practically cumulative, as the respites were short and infrequent. In the thern divisions the temperature excess averaged about 6 grees, while south of the Missouri River the average was about degrees.

June usually is a month of generous rainfall, the average a period of about 45 years being nearly 5 inches; but, with e exception of 1901 and 1911, also marked drought years, ere was less precipitation during this June than any since 70 At St. Louis, which has a precipitation record since 1832, was the driest June of record.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 ations reporting, was 29.96 inches, which is practically normal. he highest was 30.42 inches, at Hannibal on the 16th, and e lowest was 29.65 inches, at St. Joseph on the 2d. The eatest local range was .48 inch, at Kansas City.

TEMPERATURE.

The monthly mean for the State, as determined from the cords of 68 stations, was 79.3 degrees. The mean departure om the normal for 50 stations having 10 or more years record as plus 6.2 degrees, which is the largest excess for any June ring the past 27 years.

The highest local monthly mean, 84.0 degrees, occurred at ruthersville, and the lowest, 74.8 degrees, at Unionville. The ghest temperature recorded during the month was 106 degrees, Marble Hill on the 23rd, and at Caruthersville on the 25th. he greatest daily range was 48 degrees, at Belle, Palmyra and assville, on the 19th, 20th and 28th, respectively. The aver-ge number of days with maximum temperature 90 degrees or ove was 18 over the northeast plain, 25 in the southeast low-nds, 20 in the Ozark plateau, 19 over the southwest plain, 14 the northwest plateau, and for the State as a whole, 19. aximum temperatures reached or exceeded 100 degrees during e first and second decades at a few stations on one or more ates; and during the last decade there were several days in suc-ssion—from about the 23rd to the 27th—when temperatures ere 100 degrees or above, at a number of stations, though as a le confined to the territory south of the Missouri River.

HUMIDITY.

At Columbia the average relative humidity, 7 a. m., was 72 er cent; at Hannibal, 80 per cent; at Kansas City, Springfield nd St. Louis the averages of the 7 a. m. and 7 p. m. readings ere 63, 60 and 54 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 79 stations reporting, was 2.37 inches. The departure from the normal for 63 stations having 10 or more years record was minus 2.29 inches. Only two Junes, i. e., 1911 and 1901, during the past 27 years have been drier. The monthly averages and departures for the five divisions of the State were as follows: Northeast plain, 1.83 inches, deficiency 2.73 inches; southeast lowlands, 1.43 inches, deficiency 2.89 inches; Ozark plateau, 1.71 inches, deficiency 3.22 inches; southwest lowlands, 3.43 inches, deficiency 1.55 inches, and northwest plateau, 4.26 inches, deficiency 0.44 inch.

The greatest local monthly precipitation was 7.31 inches, at Kidder, and the least, 0.10 inch, at St. Louis. The greatest amount recorded in any 24 consecutive hours was 3.76 inches, at Harrisonville on the 11th and 12th.

The average number of days with 0.01 inch or more precipitation was 5, or about 4 below normal.

WIND.

The prevailing winds were from the southwest. The highest velocity recorded was 44 miles from the southwest at St. Louis on the 27th. The average hourly velocities at stations equipped with anemometers were as follows: Columbia, 8.1 miles; Hannibal, 9.9 miles; St. Louis, 12.5 miles; St. Joseph, 8.9 miles; Kansas City, 12.0 miles; Springfield, 9.6 miles; Cario, Ill., 7.4 miles, and Keokuk, Ia., 8.1 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 76, or 5 per cent above normal. At Kansas City, the percentage of the possible was 77; Springfield, 76; St. Louis, 84, and at St. Joseph, 72. For the State, the average number of clear days was 18, partly cloudy 7, and cloudy 5.

MISCELLANEOUS PHENOMENA.

Hail—5th.

Halos, Lunar—1st, 2d and 4th.

Halos, Solar—6th, 7th, 8th, 10th, 11th, 16th, 17th, 20th and 21st.

Thunderstorms—1st, 2d, 3rd, 6th, 9th, 10th, 11th, 12th, 13th, 15th, 21st, 22nd, 23rd, 26th, 29th and 30th.

COMPARATIVE DATA FOR JUNE

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	72.6	−0.5	103	37	6.20	+1.26	......	7
1889	70.7	−2.4	100	38	4.66	−0.28	......	6
1890	77.2	+4.1	105	50	2.59	−2.35	......	6
1891	73.3	+0.2	103	46	6.94	+2.00	......	13
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	7
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	9
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	7
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	10
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	9
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	12
1898	75.3	+2.2	100	42	5.88	+0.94	8.15	9
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	9
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	10
1901	77.9	+4.8	110	40	2.13	−2.81	2.99	6
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	12
1903	67.3	+4.2	95	36	3.25	−1.69	4.90	9
1904	70.5	−2.6	93	45	6.42	+1.58	5.41	11
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	7
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	10
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	11
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	11
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	11
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	8
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	6
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	9
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	6
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	5

Climatological data for June, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	.....	......	.....	.....	.....	.....	.....	0.98	−4.97	0.72	0	5	19	1	10	sw.	C. Randecker.
Brunswick	Chariton	652	34	78.0	+4.8	97	9	52	17	38	3.96	−1.73	2.48	0	6	15	7	8	e.	Louis Benecke.
Columbia	Boone	784	25	78.8	+4.3	98	26	50	17	39	3.14	−1.24	1.98	0	9	9	13	8	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	78.6	+5.4	98	9†	52	17	41	2.10	−2.58	1.15	0	4	19	5	6	......	Prof. T. B. Smith.
Fulton	Callaway	818	23	79.4ᵍ	+7.3	100	22†	52	18	44	1.95	−2.94	0.65	0	6	11ᵍ	9ᵍ	3ᵍ	sw.	L. A. Higley.
Glasgow	Howard	618	37	.....	......	.....	.....	.....	.....	.....	1.38	−3.29	0.62	0	4	22	0	8	e.	J. J. Shaughnessy.
Gorin	Scotland	700	29	.....	......	.....	.....	.....	.....	.....	3.28	−0.35	2.68	0	5	12	13	5	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	78.4	+5.1	99	26	53	20	39	2.60	−0.92	1.09	0	7	14	11	5	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	.....	......	.....	.....	.....	.....	.....	1.97	−2.58	0.66	0	6	12	7	11	s.	C. T. Maushund.
Jefferson City	Cole	628	33	78.5	+4.5	103	10	50	17	44	2.16	−2.12	0.97	0	8	23	0	7	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	...	......	.....	.....	.....	.....	.....	3.45	....	2.00	0	4	.....	.....	.....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	37	77.0	+5.4	100	25	43	17	45	0.94	−3.25	0.38	0	5	23	6	1	se.	J. T. Farrell.
Macon	Macon	881	2	78.0	......	98	26	51	17†	44	2.53	....	1.01	0	6	17	7	6	sw.	John A. Cook.
Mexico	Audrain	797	37	79.5	+6.2	103	25†	49	17	46	0.69	−4.65	0.40	0	5	16	4	10	sw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	80.8	+7.0	104	26	55	16†	40	0.38	−4.25	0.24	0	3	7	21	2	w.	E. E. Steines.
Palmyra	Marion	652	3	80.2	......	103	24†	51	17	48	1.17	....	0.91	0	4	16	12	2	sw.	W. B. Markell.
St. Catherine	Linn	914	1	77.5	......	96	26	50	17	37	2.07	....	0.64	0	9	14	16	0	sw.	L. D. Baker.
St. Charles	St. Charles	614	37	79.9	+6.3	102	19†	54	17†	44	0.91	−3.29	0.75	0	2	14	12	4	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	81.1	+6.0	101	26	57	20	36	0.10	−4.37	0.07	0	7	19	9	2	sw.	U. S. Weather Bureau.
St. Louis(2)	......do	578	3	81.2	......	102	26	58	16†	35	0.24	....	0.13	0	6	16	11	3	se.	St. Louis University.
Steffenville	Lewis	576	21	79.8	+7.4	103	25†	48	17	47	1.82	−2.07	0.85	0	4	15	12	3	sw.	Frank Hall.
Sublett ‡‡	Adair	1,000	....	.....	......	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	Lewis Spriggs.
Unionville	Putnam	1,072	22	74.8	+2.6	96	25	43	17	42	3.40	−0.78	2.70	0	7	10	10	10	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	80.6	......	104	26	53	17	37	1.80	....	0.85	0	3	16	8	6	s.	C. B. Ellis.
Warrenton	Warren	865	24	79.9	+6.6	103	26	53	17	43	0.73	−3.80	0.33	0	3	15	5	10	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	.....	......	.....	.....	.....	.....	.	2.85	−0.56	1.45	0	4	26	4	0	s.	D. L. Albert.
Cardwell	Dunklin	...	3	81.4	......	102	10	62	2	33	2.75	....	1.75	0	2	26	4	0	s.	E. M. Perry.
Caruthersville	Pemiscott	...	23	84.0	+7.2	106	25	61	18	35	0.17	−3.79	0.14	0	2	27	3	0	se.	H. I. Averill.
Doniphan	Ripley	440	11	81.2	+7.0	104	26	57	18	41	0.27	−4.34	0.10	0	5	22	4	4	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	80.9	+7.1	103	26	58	16	36	2.51	−1.73	1.37	0	5	15	8	7	s.	L. M. Bean.
Marble Hill	Bollinger	420	21	80.8	+6.9	106	23	57	30	37	1.35	−2.97	0.70	0	2	19	10	1	s.	Dr A. F. Hendricks.
New Madrid	New Madrid	285	21	.....	......	.....	.....	.....	.....		0.63	−3.47	0.50	0	2	25	1	4	s.	Miss Josie Smith.
Cairo, Ill	Alexander, Ill	359	43	81.7	+6.5	100	27	62	16	26	0.92	−3.39	0.37	0	5	15	9	6	sw.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	24	.....	......	.....	.....	.....	.....	.	0.38	−3.30	0.18	0	3	21	0	9	s.	G. V. Randolph.
Belle	Maries	1,000	23	80.4	+7.6	102	25	50	19	48	1.20	−3.63	0.68	0	4	9ᵇ	16ᵇ	3ᵇ	s.	A. J. Wofford.
Birchtree	Shannon	1,200	....	.....	......	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	V. H. Kirkendall.
Bolivar	Polk	1,020	27	79.3	+6.6	101	11	54	16	34	3.74	−1.82	2.54	0	5	21	7	2	sw.	A. C. Fink.
Cassville	Barry	1,500	4	76.2	......	97	11†	49	28	48	1.79	....	0.63	0	4	26	3	1	s.	Mrs Zuma Bloomer.
Crocker	Pulaski	1,300	3	81.7	......	102	26	57	17	38	1.05	....	0.52	0	3	22	5	3	ne	Roy W. Reed.
Dean.‡‡	McDonald	1,000	16	78.3	+5.3	99	19	53	28	45	1.98	−3.85	0.85	0	4	24ᵃ	1ᵃ	4ᵃ	.....	H. E. Dean.
Duncan	Webster	...	1	78.4	......	100	11†	54	16†	39	0.87	....	0.36	0	5	21	6	3	s.	C. A. Mingus.
Eldon	Miller	934	3	79.3	......	100	9†	55	17	39	2.27	....	1.21	0	8	7	22	1	sw.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	1	78.5	......	99	10†	55	2†	31	4.63	....	3.50	0	3	23	7	0	sw	E. C. Walton.
Gano ‡‡	Dent	...	11	80.0	+7.4	103	10	55	16	45	1.25	−3.41	0.50	0	5	23	4	3	s.	A. C. Leach.
Goodland	Iron	1,000	10	76.8	+5.7	100	10†	53	17	45	0.86	−2.67	0.70	0	2	17	8	5	s.	F. M. Adams.
Hollister	Taney	1,000	5	80.7	......	100	25†	54	17	30	0.70	....	0.30	0	4	28	0	2	sw.	W. P. Chapmann
Houston	Texas	1,280	22	78.8ᶠ	+6.9	100	19	56	17	40	0.85	−4.16	0.31	0	4	24	4	2	s.	R. F. Harmon.
Ironton	Iron	925	37	78.6	+6.6	103	10	54	17	44	0.64	−4.44	0.37	0	4	11	12	7	n.	W. H. Delano.
Koshkonong	Oregon	911	14	81.9	+8.2	101	11	57	17	29	0.68	−3.71	0.42	0	4	23	5	2	sw.	J. W. Hitt
Lebanon	Laclede	1,105	26	80.6	+5.6	101	20	54	16	38	2.24	−3.27	1.04	0	6	22	5	3	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	80.0	......	100	19	56	17	35	1.88	−2.71	0.75	0	4	21	6	3	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	79.1	+7.9	99	11	55	16	33	1.81	−2.65	1.15	0	4	18	7	5	s.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	36	79.0	+5.6	99	10†	55	29	34	1.61	−3.71	0.63	0	5	23	4	3	sw.	J. R. White & Son.
Neosho	Newton	1,083	32	79.4	+5.7	98	28	52	28	46	1.87	−3.66	0.56	0	5	26	3	1	sw	W. O. Buck.
Rolla	Phelps	1,139	34	80.4	+8.1	102	24†	52	16†	43	1.47	−2.82	0.96	0	4	25	4	1	sw	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	78.8	+6.5	97	19	57	16	30	1.48	−3.71	0.95	0	5	21	7	2	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	22	.....	......	.....	.....	.....	.....	.....	4.05	−1.14	1.35	0	4	18	9	3	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	80.7	......	101	26	56	28	39	3.06	....	2.00	0	5	20	6	4	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	24	78.4	+4.0	97	20	58	17	35	5.00	−0.93	1.50	0	6	14	12	4	s.	Mark Brown.
Clinton	Henry	800	28	79.9	......	103	20	57	3	41	4.28	−0.68	2.00	0	6	19	8	3	sw.	A. E. Derwent. M. D.
Harrisonville	Cass	912	43	78.8	+5.6	99	9†	59	18†	36	4.22	−0.41	3.76	0	7	14	2	14	sw.	A. J. Sharp.
Joplin	Jasper	975	....	.....	......	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	Joplin High School.
Lamar	Barton	964	35	81.8	+7.9	102	19†	57	17	38	1.30	−3.60	0.56	0	4	18	7	5	sw.	J. H. Adams.
Lamonte	Pettis	863	26	78.8	......	99	25†	52	17	33	2.57	−2.23	1.20	0	7	10	18	2	sw.	J. Ed. Hall.
Marshall	Saline	779	22	78.4	+5.6	99	9	52	17	39	1.92	−2.78	0.94	0	7	23	6	1	sw.	Prof. W. L. Black.
Nevada	Vernon	860	21	81.5	......	98	11	59	17	21	3.45	−1.87	1.45	0	7	20	3	7	sw.	C. [illegible]well
Osceola	St. Clair	738	15	.....	......	.....	.....	.....	.....	.....	3.50	−1.14	2.54	0	5	15ᵈ	2ᵈ	8ᵈ	sw.	W. I. Matthews.
Warrensburg	Johnson	883	36	80.2	+6.2	101	10†	55	17	40	3.34	−1.64	2.10	0	6	16	9	5	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	81.3	+7.7	102	20	57	16	39	5.05	−0.23	2.43	0	8	18	11	1	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	....	28	79.4	+6.9	100	9†	52	17	32	5.35	+0.29	2.65	0	6	22	6	2	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	24	76.9ᵍ	+4.9	97	9	50	17	39	4.94	+0.65	3.45	0	8	11ᵍ	8ᵍ	4ᵍ	sw.	M. H. Moulton
Conception	Nodaway	982	31	75.8	+5.1	94	10†	52	17	33	5.04	+0.28	1.58	0	7	11	15	4	s.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	77.3	+6.7	100	24	52	17	41	3.57	−0.69	1.13	0	9	26	2	2	s.	W. H. Campbell.
Kansas City	Jackson	963	26	78.4	+5.4	96	26	58	17	34	5.51	+0.85	1.62	0	11	15	10	5	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	22	78.0	+5.8	97	9	54	17	35	7.31	+2.86	3.01	0	9	13	7	10	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	79.0	+6.8	98	9	52	17	36	2.32	−2.75	0.97	0	6	20	1	9	s.	J. W. Keithley.
Liberty	Clay	864	26	78.6	+5.3	98	9†	53	17	36	3.58	−1.63	0.68	0	8	16	13	1	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	76.6	+5.7	98	24†	49	17	39	3.20	−1.81	1.18	0	12	20	3	7	s.	J. R. Brink.
Oregon	Holt	1,113	59	76.7	+4.4	95	20†	53	17	35	4.14	−0.76	1.55	0	9	20	5	5	s.	Tom Curry.
Pattonsburg	Daviess	....	5	.....	......	.....	.....	.....	.....	....	2.79	....	1.00		6	22	2	6	ne.	William Burton.
St. Joseph	Buchanan	825	43	78.2	......	97	20	55	17	35	5.40	....	3.31	0	8	14	8	8	s.	U. S. Weather Bureau
Tarkio	Atchison	....	....	.....	......	.....	.....	.....	.....	....	.....	....	.....	.....	.....	.....	.....	....		John F. Frazier
Trenton	Grundy	812	20	78.4	+6.2	97	26	51	17	36	2.20	−1.73	0.72	0	6	24	1	5	s.	W. H. Estes.
State means and extremes			...	79.3	+6.2	106	23†	43	17	48	2.37	−2.29	3.76	0	5	18	7	5	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for June, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
ville ‖	Missouri			.04									.72		.04	.12	.06																0.98
swick ‖	Grand			T.							.02		.68	.06			.64						.08							T.			3.96
mbia***	Missouri		.01									.35	.49	.02		.08							.26	.02				.07		T.	1.84		3.14
tte	do	T.	T.										.74	.06		.15							T.							T.	1.15		2.10
on	do											.60	.51	.01		.04								.65							.14		1.95
gow ‖	do			.26									.62		.14		.36																1.38
n	Mississippi	.24												2.68		.13							.16								.07		3.28
nibal***	do	T.		T.						.39		.40	.33	.05	.01	T.							.69					T.		T.	.73		2.60
mann ‖	Missouri	.32	.66										.56				.01							.16	.26								1.97
rson City ‖	do	.12	.45										.97	.02		.14	.15							.26				.05					2.16
esville	Chariton										.82					.57							.06								2.00		3.45
siana	Mississippi	T.									.05		.20										.27	.38							.04		0.94
on	Chariton										1.01	T.	.24			.31						T.	.63					.07			.27		2.53
[illegible]	Mississippi		T.	T.									.40	.01			.03							.18				.07					0.69
eld	Meramec	.02											.24			T.								T.						T.	.12		0.38
vra	Mississippi			.02									.16	.08																	.91		1.17
atherine	Grand	T.									.16	.02	.05	.64	T.	.62	T.					.01	.20					.03			.34		2.07
arles	Missouri	T.									T.		.75	.16										T.							T.		0.91
ouis (1)***	Mississippi	.01										T.	.07	T.		T.								T.		T.		T.			.02		0.10
ouis (2)	do	.01											.13	.01		T.								T.		.04		.02			.03		0.24
nville	do		.60		.06						T.		T.	.31									.85					T.			T.		1.82
tt	do																																
iville ‖	Grand	.03										T.		.90	1.80	.15	.16						.06	.30									3.40
dalia	Mississippi	.85											.40		T	T.							.55								T.		1.80
renton ‖	do												.33		T.	T.								.30	.10								0.73
theast Lowlands.																																	
irardeau ‖	Mississippi						.80						1.45				.10										.50						2.85
well	do	1.00		T.												1.75																	2.75
ersville	do	T.		T.		T.	T.					.03				.14		T.								T.							0.17
pan	Black	.05										T.				.02	T.	.10				.02				.08							0.27
son	Mississippi	T.				.90						1.37			.07	.16										.01							2.51
ilt	do											.65				.70																	1.35
Madrid ‖	do							.13									.50																0.63
, Ill***	do	.37				.15	.18					.15	T.	T.	T.	.07	T.	T.								T.					T.		0.92
k Plateau																																	
ngton ‖	Gasconade												.18				.12	.08															0.38
ell	Osage																																
	Meramec		T.										.68			.16	.16														.20		1.20
tree	Black																																
ar	Osage												.44				2.54											.08		.39	.29		3.74
ille	White											T.				.55	.63											T.		.47	.14		1.79
ser	Gasconade												.52			.43	.10														T.		1.05
	Neosho	.07														T.	.75											T.		.85	.31		1.98
an	Osage	T.	T.									T.	.36			.28	.07													.13	.03		0.87
n	do		.02									.31	1.21			.36	.01							.23						.01	.12		2.27
City	Black											.13		1.00		3.50																	4.63
	Meramec												.50	.20	.05	.40	.10														T.		1.25
land	Black											.70				.16																	0.86
ster	White															.20	.30													.10	.10		0.70
ton	Gasconade											.13	.31			.30	T.													T.	.11		0.85
ton	Mississippi			T.									.37	.03		.04	.20	T.									T.						0.64
konong	Black											.07	.10			.42		.09												T.			0.68
non	Osage											.05	.60			1.04	.09													.16	.30		2.24
wood	do											.75	.22				.43											T.		.48			1.88
ntain Grove	White											T.	1.15			.21	.03				.42	T.								T.	T.		1.81
nt Vernon	Neosho											T.	.15			.63	.20													.53	.10		1.61
io	do	.08														.48	.53											T.		.22	.56		1.87
a	Meramec											.96	.15			.22															.14		1.47
ngfield***	White											T.	06			.26	.69											T.		.40	.07		1.48
atland	Osage											.55	1.30			.85															1.35		4.05
thwest Plain.																																	
ret	Osage		T.			T.							2.00			.11	.45						T							.17	.33		3.06
eton City	do		.93									1.14	1.50			.41	.47						.55										5.00
on	do		.40									2.00	1.00			.50								.28						.10			4.28
risonville ‖	do		.12										3.76			.05	.07						.08	.07						.07			4.22
n	Neosho																																
ar ‖	do	.20	T.										.18	T.			T.	.56												.36	T.		1.30
onte	Missouri	T.	.05									.20	1.20	.20		.15							T.	.12							.65		2.57
shall	do	.05		15								T.	.94	.05		.44							.08							T.	.21		1.92
ada	Osage											.29	.78				1.45						.21	.22						.28	.22		3.45
ola ‖	do												2.54			.55	.11	.27												.03			3.50
rensburg	Missouri		.11									.49	2.10		T.	.08	T.													.12	.44		3.34
saw	Osage		.26									1.74	2.43			.11	.06						T.	.21				T.		.06	.18		5.05
thwest Plateau.																																	
lon	Grand									1.25				.50	.30		.40					.25									2.65		5.35
any	do										T.	T.	.17	3.45	.04	.38						.02	.45	.05							.38		4.94
eption	Missouri		T.				T.				T.	.39		1.58	.08	1.26						.06	1.14								.53		5.04
t City	Grand	.09	T.	T.			T.	.10		T.	T.	.21	.16	1.13	.10	1.10					T.	.40						T.			.28		3.57
sas City***	Missouri	.13	.34									1.27	.24	.02	T.	.54	.02					1.51	.11							.13	1.20		5.51
ler ‖	Grand			.02							.35		.91	.40	.05	.16	2.16						.25							T.	3.01		7.31
ngton ‖	Missouri	.03	.18										.97			.34	.18						.62										2.32
ity	do	.68	.32									.56	.65	.07	T.	.58						T.		.12							.60		3.58
ville ‖	do	.16	.03	T.			T.	.06			.05	.07	.75	1.18	.17	.28	.18						.10	.17									3.20
ton	do		.16				.03					.15	.08	1.55		.10						.42	.18								1.47		4.14
nsburg ‖	Grand		T										.37	1.00	.02	.10	.75							.55									2.79
seph***	Missouri		.23				T.				.03	.30		.41	T.	.30						.38	.47								3.28		5.40
io	do																																
ton	Grand		T.	.04								.04	.72	T.	T.	.40						.49									.51		2.20

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late he afternoon, near sunset, and precipitation recorded is for the 24 hours ending at that time of observation.

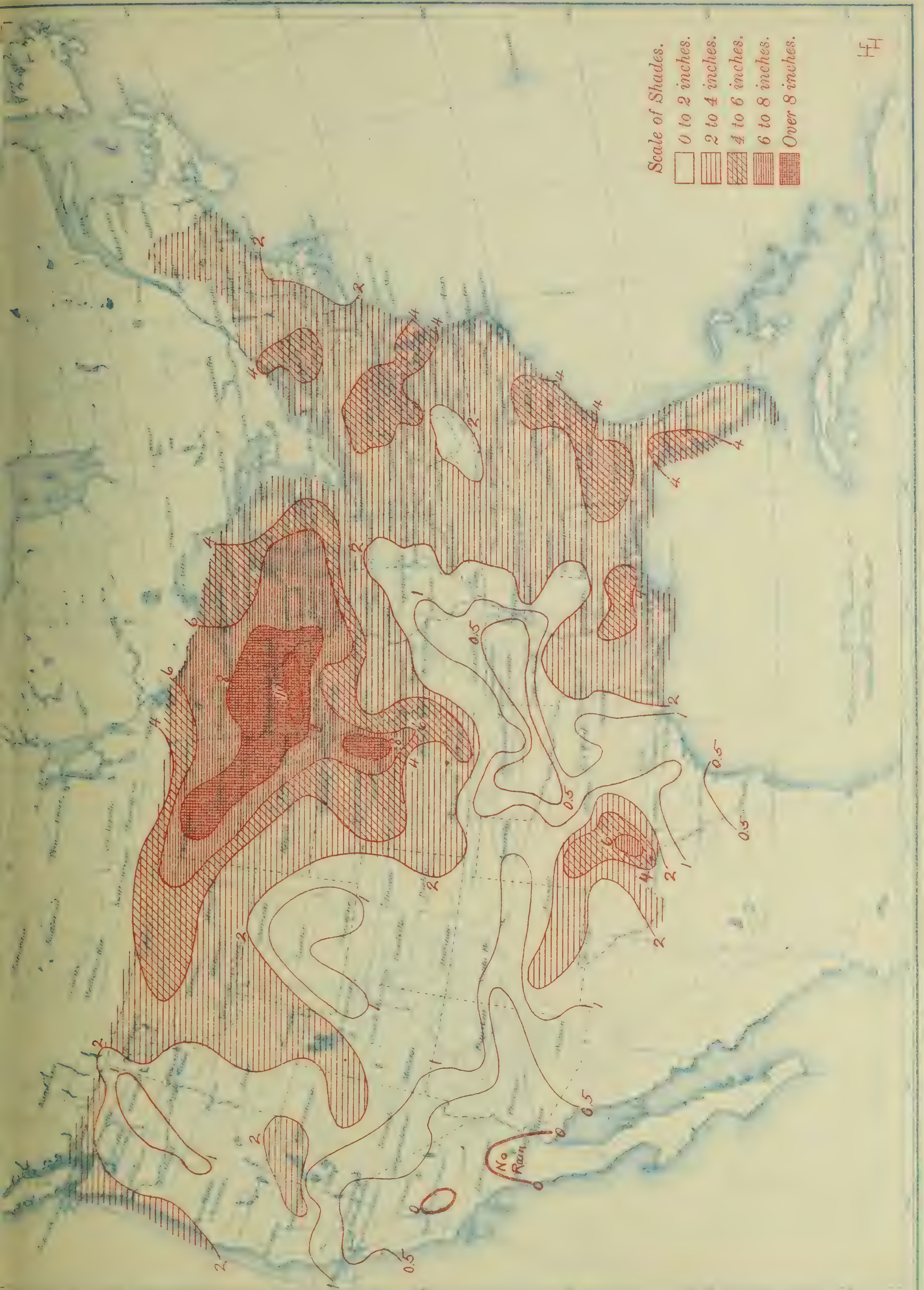
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Daily temperatures for June, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	84	80	88	92	91	92	93	94	97	95	90	85	91	88	75	74	78	88	87	95	94	90	94	96	96	97	89	86	86	75		88.7
	Minimum	68	62	63	71	72	74	75	73	74	73	71	68	68	68	68	59	52	55	63	57	60	72	75	75	75	76	75	60	59	61		67.4
Columbia	Maximum	83	79	90	94	92	94	94	95	98	98	87	85	92	90	76	75	79	89	93	95	98	97	94	97	97	98	92	87	86	78		90.1
	Minimum	67	62	68	72	74	73	73	70	74	73	70	67	71	66	66	54	50	55	63	56	76	72	72	74	76	75	74	63	59	64		67.6
Fayette	Maximum	82	80	89	92	90	93	93	94	98	96	95	85	90	89	73	74	79	88	91	96	97	95	96	98	98	98	91	87	86	78		89.7
	Minimum	66	62	70	72	70	72	72	70	72	74	70	66	72	69	63	57	52	56	63	55	77	73	72	74	73	73	73	62	59	63		67.4
Hannibal	Maximum	85	80	91	94	92	93	94	95	98	93	94	86	92	88	76	70	78	88	89	92	98	86	94	98	98	99	91	78	81	78		89.0
	Minimum	67	58	67	72	75	75	75	74	73	74	69	69	69	65	67	57	56	55	61	53	79	74	73	74	75	77	71	60	58	61		67.8
Jefferson City §§	Maximum	85	80	90	94	95	95	96	98	100	103	89	89	94	95	80	75	82	91	95	99	100	101	98	100	101	102	98	92	89	84		93.0
	Minimum	63	58	59	67	68	69	68	67	66	69	66	63	66	69	66	56	50	55	62	55	59	69	68	69	72	72	72	60	57	59		64.0
Macon	Maximum	86	80	90	93	93	93	94	94	96	94	94	86	90	88	81	73	78	88	88	95	96	90	94	97	97	98	89	82	84	79		89.3
	Minimum	68	56	66	72	73	71	73	68	74	71	68	68	69	64	66	56	51	57	68	51	77	73	73	79	72	77	73	58	56	57		66.8
Mexico §§	Maximum	84	82	93	98	95	97	97	99	102	99	95	89	95	93	76	75	85	95	98	99	101	99	97	101	103	103	95	89	87	80	....	93.4
	Minimum	68	58	57	67	71	73	71	69	72	73	71	69	69	69	65	56	49	51	61	53	55	75	71	73	76	75	75	60	58	58	....	65.6
Oakfield	Maximum	82	81	91	96	94	94	95	96	99	101	96	89	95	93	87	72	84	91	103	95	101	102	98	103	103	104	100	91	85	84	....	93.5
	Minimum	68	57	66	74	70	69	70	71	72	75	70	68	71	69	66	55	55	59	64	55	78	77	74	74	77	77	80	64	57	62	....	68.1
St. Catherine	Maximum	84	79	88	92	91	93	92	93	92	92	91	85	89	86	79	70	75	82	83	90	94	88	93	95	95	96	89	81	83	75	....	87.2
	Minimum	64	60	67	71	80	82	75	80	75	72	68	68	66	64	65	56	50	59	67	53	75	69	73	74	73	77	72	58	58	62	....	67.8
St. Louis (1)	Maximum	84	83	91	93	94	92	94	95	98	98	96	85	94	90	80	72	82	89	98	93	98	97	96	99	99	101	97	86	83	83	....	91.3
	Minimum	68	61	65	75	75	71	74	75	76	80	78	71	72	69	67	57	59	66	64	57	77	80	78	80	82	81	80	65	61	63	....	70.9
Sublett	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Unionville §§	Maximum	85	80	90	94	92	94	92	94	95	92	93	91	85	86	76	72	75	85	79	90	92	90	93	95	96	95	86	75	86	75	....	87.4
	Minimum	58	55	60	66	70	72	71	72	73	67	65	62	66	62	61	55	43	46	60	48	56	68	70	72	70	72	68	55	50	55	....	62.3
Warrenton §§	Maximum	83	81	92	95	95	96	97	98	101	100	94	90	94	92	77	72	85	92	100	97	101	100	96	101	102	103	98	89	85	82	....	92.9
	Minimum	68	56	60	68	71	74	70	70	69	76	74	68	70	69	66	55	53	60	67	54	60	75	69	72	77	75	80	62	59	61	....	66.9
Southeast Lowlands.																																	
Cardwell	Maximum	86	84	95	93	93	93	94	95	98	102	100	98	100	102	100	78	77	88	98	98	98	98	98	100	101	100	101	98	92	[illegible]	....	95.1
	Minimum	66	62	65	66	68	68	70	64	72	65	70	70	70	70	70	65	60	60	70	70	70	70	72	70	70	73	73	65	60	[illegible]	....	67.6
Caruthersville	Maximum	97	90	96	93	96	95	97	98	101	102	101	98	102	105	99	83	82	93	101	98	100	100	106	103	106	104	104	99	89	[illegible]	....	97.5
	Minimum	69	68	68	71	72	70	72	69	70	69	73	76	75	75	71	66	64	61	66	71	72	73	74	73	74	74	77	76	66	69	....	70.6
Doniphan	Maximum	88	85	95	94	94	95	95	97	100	102	101	97	100	102	92	74	81	91	101	100	100	101	102	102	101	104	100	100	95	95	....	96.1
	Minimum	63	65	62	67	68	68	67	67	64	63	67	70	71	68	71	64	59	57	60	68	70	70	69	70	[illegible]	70	71	61	62	63	....	66.2
Jackson	Maximum	93	88	93	94	95	91	91	95	97	99	102	....	94	96	89	78	83	85	98	98	98	97	100	101	102	103	102	[illegible]	90	85	....	94.4^{1}
	Minimum	68	64	65	71	73	66	66	65	66	68	70	....	71	71	63	58	58	62	65	62	72	76	75	74	72	72	74	68	60	64	....	67.4^{1}
Marble Hill	Maximum	92	95	92	89	93	94	94	96	101	103	103	93	97	98	91	79	80	88	98	96	97	98	106	101	105	101	[illegible]	98	91	90	....	95.2
	Minimum	63	65	65	58	63	63	66	68	70	66	66	70	77	67	66	59	63	60	64	71	70	74	71	69	69	72	76	[illegible]	61	57	....	67.4
Ozark Plateau.																																	
Birchtree	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cassville	Maximum	89	89	86	85	89	87	86	89	91	94	97	93	94	96	91	71	80	96	94	96	96	97	94	97	96	97	97	97	93	87	....	91.5
	Minimum	65	62	61	65	65	65	60	63	63	56	61	64	61	61	58	61	56	57	58	56	57	68	66	65	64	65	67	49	52	59	....	61.0
Duncan	Maximum	84	84	88	91	91	91	....	94	96	98	100	95	96	98	87	72	79	89	100	100	97	96	98	98	79	100	96	95	88	81	....	91.8^{1}
	Minimum	63	63	65	70	63	66	....	66	63	68	65	66	61	73	66	54	54	57	61	64	68	67	68	73	71	67	76	59	63	61	....	64.9^{1}
Eldon	Maximum	86	83	91	94	93	93	95	97	100	100	88	88	94	93	85	72	82	90	98	97	97	97	96	98	97	100	94	92	92	80	....	92.1
	Minimum	65	61	68	70	68	70	69	68	69	72	68	65	68	71	68	57	55	58	65	58	72	68	71	69	73	73	76	58	59	62	....	66.5
Fruit City	Maximum	85	82	90	83	89	91	91	94	95	99	99	91	92	93	87	74	76	85	94	92	95	93	95	94	96	97	92	92	89	90	....	90.5
	Minimum	60	55	75	60	58	65	70	63	72	75	70	65	68	68	70	55	58	60	65	63	76	72	69	74	73	75	75	65	62	59	....	66.5
Gano	Maximum	85	87	93	94	97	94	95	97	98	103	98	91	95	97	85	75	82	89	100	102	98	100	101	95	101	102	97	92	87	82	....	93.9
	Minimum	64	58	66	70	66	67	68	69	66	70	68	65	68	69	67	55	57	60	63	57	72	70	71	74	72	72	76	63	62	60	....	66.2
Hollister	Maximum	88	90	92	92	93	92	90	94	96	96	98	96	98	96	88	74	78	80	88	88	98	98	96	98	100	100	90	98	88	94	....	92.2
	Minimum	68	70	72	68	70	68	70	72	70	68	70	72	68	72	74	62	54	60	62	62	72	74	76	74	72	74	76	70	70	65	....	69.2
Ironton §§	Maximum	86	85	92	95	94	94	95	96	98	103	101	92	97	96	90	70	83	90	100	97	98	98	99	100	100	102	99	96	90	86	....	94.1
	Minimum	65	59	57	68	64	66	66	62	62	64	61	59	68	67	66	59	54	56	56	58	71	70	70	65	66	67	68	65	58	55	....	63.1
Lebanon	Maximum	90	87	89	92	91	91	92	93	96	99	99	93	96	96	85	76	82	90	100	101	96	97	99	99	100	100	97	95	88	84	....	93.1
	Minimum	64	65	66	69	69	68	71	68	68	78	69	65	69	73	65	54	55	64	70	64	82	72	73	74	75	72	79	57	60	64	....	68.1
Mountain Grove	Maximum	84	84	87	89	90	90	92	93	95	96	99	92	94	94	90	73	75	85	97	98	93	94	94	95	97	98	95	93	90	84	....	91.0
	Minimum	65	66	65	68	70	67	69	70	68	70	70	67	70	73	64	55	57	61	64	70	71	71	72	73	73	70	68	63	64	63	....	67.2
Neosho	Maximum	89	89	87	88	90	89	88	90	92	94	95	95	94	96	94	75	82	91	97	97	95	94	96	96	97	96	95	98	97	94	....	92.3
	Minimum	65	64	67	69	69	70	67	69	72	60	66	68	61	70	66	65	58	58	63	65	72	74	73	71	69	71	74	52	64	65	....	66.6
Rolla	Maximum	90	85	92	94	95	95	95	97	98	101	97	90	95	94	84	80	84	89	98	101	99	99	100	100	102	102	97	92	90	84	....	94.0
	Minimum	62	61	67	72	68	70	72	71	70	72	65	66	69	69	57	52	52	60	64	58	64	73	74	72	73	72	78	62	60	62	....	66.9
Springfield	Maximum	84	85	85	86	87	87	87	90	90	92	94	92	94	93	84	70	75	86	97	95	92	92	92	93	94	96	94	94	84	81	....	88.8
	Minimum	67	67	68	69	68	69	70	69	70	73	72	65	71	73	70	57	57	63	67	72	73	73	71	74	75	74	75	66	63	67	....	68.9
Southwest Plain.																																	
Amoret	Maximum	91	89	90	91	92	93	94	95	98	99	100	88	97	98	94	78	81	91	98	99	98	97	98	98	100	101	99	95	91	97	....	94.3
	Minimum	62	68	67	70	70	68	69	72	73	69	68	65	70	66	66	58	59	59	68	61	66	71	75	72	74	75	71	56	61	64	....	67.1
Clinton	Maximum	80	81	87	89	89	94	97	97	100	100	101	89	99	95	85	72	82	94	100	103	97	100	97	98	101	101	96	94	91	86	....	93.2
	Minimum	65	64	57	69	69	70	70	68	73	72	68	65	70	70	58	58	58	60	72	62	72	70	72	67	68	72	75	60	60	[illegible]	....	66.6
Harrisonville §§	Maximum	84	83	89	93	92	92	93	93	99	98	88	83	92	90	83	68	78	89	91	98	97	95	97	98	99	99	82	90	88	74	....	89.8
	Minimum	66	65	65	70	70	72	74	71	74	72	72	65	67	70	70	62	60	59	63	62	64	70	73	73	75	75	72	59	61	63	....	67.8
Lamar §§	Maximum	88	91	87	90	93	91	91	93	95	97	98	95	97	98	98	67	83	92	102	101	97	98	98	99	102	99	98	99	89	86	....	93.7
	Minimum	66	68	70	71	71	72	70	71	71	69	72	67	69	71	70	67	57	59	68	70	75	77	78	75	74	73	76	61	64	67	....	70.0
Lamonte	Maximum	86	82	89	93	91	93	93	95	98	96	90	82	90	91	90	72	82	87	92	97	96	91	92	96	99	99	90	90	88	78	....	90.3
	Minimum	64	62	68	72	66	72	69	71	72	69	68	66	71	67	65	60	52	54	65	72	74	69	72	74	72	75	72	58	65	65	....	67.4
Marshall	Maximum	86	86	86	92	91	92	94	94	99	97	86	87	92	91	81	76	80	90	94	96	96	93	95	98	98	98	91	88	87	86	....	90.5
	Minimum	62	66	66	70	70	71	72	70	73	71	66	61	72	74	67	58	52	54	62	57	71	70	73	71	71	73	71	58	59	59	....	66.3
Warrensburg	Maximum	81	83	91	95	96	95	95	97	100	101	91	87	93	93	84	72	81	90	93	100	97	97	98	99	99	101	93	90	88	84	....	92.1
	Minimum	66	62	69	70	71	73	73	70	73	72	69	66	72	69	67	56	55	60	68	60	74	72	74	75	74	75	73	64	60	64	....	68.2
Warsaw	Maximum	88	82	92	95	96	96	97	98	100	100	96	89	95	96	85	73	82	91	96	102	99	99	100	100	101	101	95	94	89	85	....	93.7
	Minimum	67	63	71	72	71	74	71	70	74	68	64	62	70	72	70	57	65	68	70	63	75	72	74	73	74	68	78	58	61	71	....	68.9
Northwest Plateau.																																	
Avalon	Maximum	88	82	90	95	93	93	94	94	100	94	95	89	91	87	83	75	81	89	84	97	95	89	97	98	100	99	93	88	89	82	....	90.8
	Minimum	67	60	68	70	73	73	73	71	74	74	70	68	76	67	67	58	52	61	68	65	77	69	72	72	74	75	70	58	58	60	....	68.0
Grant City	Maximum	84	76	93	93	94	96	98	98	98	96	98	87	90	85	80	71	77	90	77	97	95	91	96	100	98	98	87	83	83	75	....	89.4
	Minimum	63	61	68	68	71	66	68	72	73	69	66	65	64	63	62	60	52	60	65	56	78	66	70	65	68	68	66	56	66	60	....	65.2
Kansas City	Maximum	81	80	88	92	90	89	89	90	94	95	91	82	92	87	76	70	79	89	87	96	92	85	94	95	[illegible]	[illegible]	88	85	87	72	....	87.5
	Minimum	69	62	71	72	73	73	76	76	76	76	68	67	71	68	68	60	58	66	68	62	68	68	74	77	78	79	73	63	60	63	....	69.4
Kidder §§	Maximum	85	80	90	94	94	92	93	92	97	92	95	90	88	82	73	75	76	85	80	93	90	87	92	93	95	95	87	89	81	77	....	87.5
	Minimum	68	63	70	73	72	74	76	71	75	73	69	68	66	65	69	60	54	63	71	58	78	73	74	73	73	77	68	58	60	63	....	68.5
Lexington §§	Maximum	84	81	89	93	92	92	92	92	98	96	93	88	92	89	75	73	80	90	90	96	95	89	93	95	97	96	89	88	88	72	....	89.2
	Minimum	66	63	71	72	70	72	75	72	75	73	73	66	73	70	68	62	52	60	70	60	78	69	71	75	75	78	72	59	[illegible]	64	....	68.7
Maryville §§	Maximum	87	78	92	97	94	92	93	94	97	97	88	87	84	90	76	74	81	91	81	97	93	91	95	98	97	98	87	85	89	75	....	89.2
	Minimum	61	60	58	60	72	68	71	72	71	71	62	63	65	64	64	60	49	58	65	58	60	70	68	72	68	[illegible]	64	54	59	60	....	64.0
Oregon	Maximum	83	77	88	92	90	88	89	92	92	92	87	85	90	83	78	72	80	90	81	95	90	87	92	94	94	95	88	86	85	77	....	87.1
	Minimum	63	59	69	70	74	69	74	73	72	71	64	64	65	65	65	61	53	60	70	60	71	68	68	71	73	76	64	56	61	60	....	66.3
St. Joseph	Maximum	86	80	89	92	93	90	90	91	93	94	90	86	92	83	75	74	80	91	83	97	90	90	93	95	96	[illegible]	87	85	85	70	....	87.9
	Minimum	66	59	72	73	73	73	76	76	76	73	68	66	66	68	67	61	55	65	67	62	69	70	69	78	77	80	68	60	62	62	....	68.6
Trenton	Maximum	87	82	91	95	93	94	91	93	95	93	93	88	88	87	80	78	77	85	84	93	94	89	94	96	95	97	95	83	81	81	....	89.1
	Minimum	66	63	64	71	74	73	76	73	76	72	68	68	64	65	64	60	51	62	69	57	76	69	73	75	68	78	71	61	61	63	....	67.7

^{1} ^{2} ^{3} etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
0
0.5
1
2
4
6
8

M S

OF THE
UNIVERSITY OF ILLINOIS
25 AUG1914

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JULY, 1914

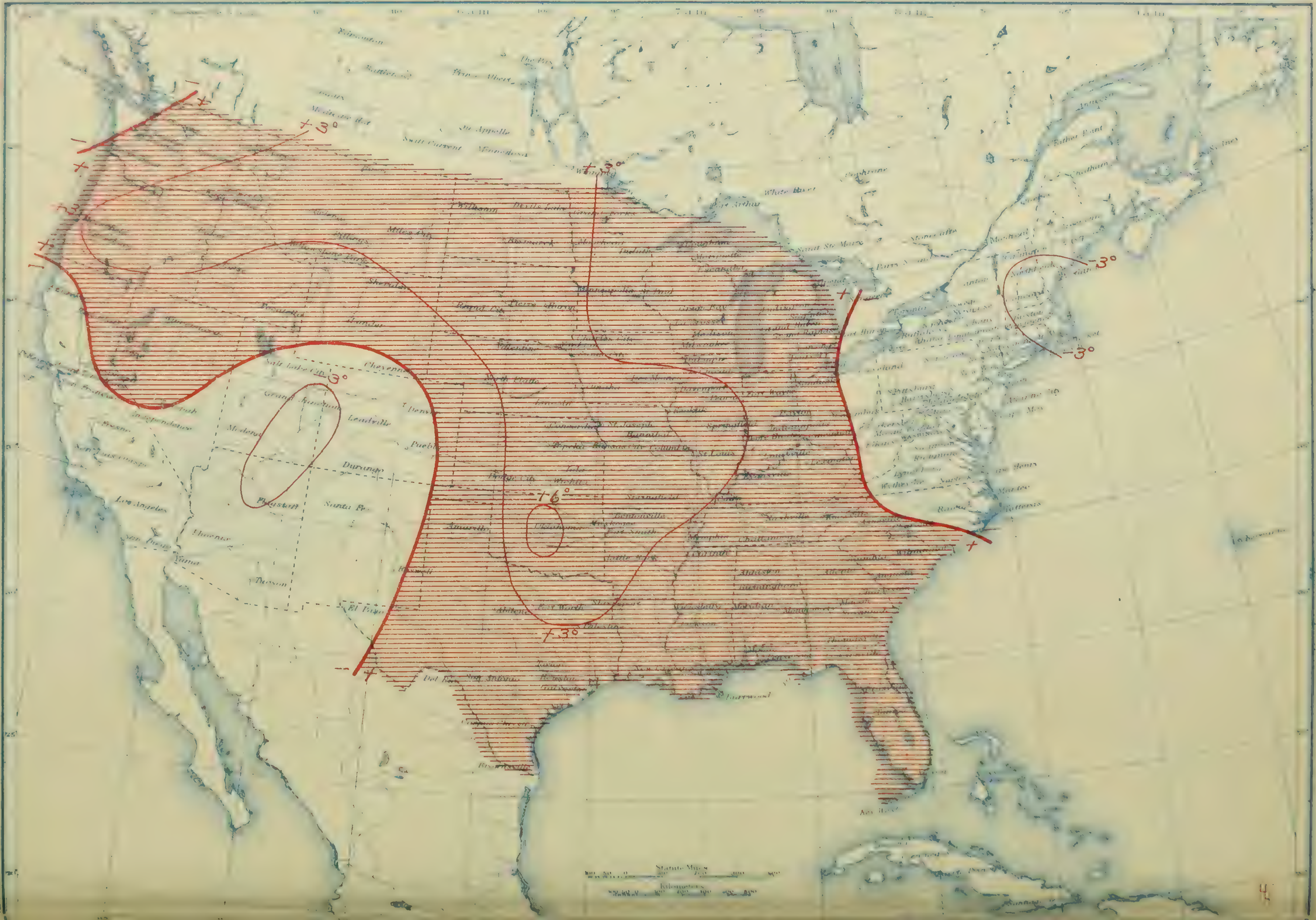
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
AUGUST 20, 1914.

Departure of the Mean Temperature from the Normal, July, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

ol. XVIII. Columbia, Mo., July, 1914. No. 7

GENERAL SUMMARY.

July, 1914, was warmer and drier than normal. While he weather was decidedly unfavorable for vegetable growth over he eastern half of the State, it was not altogether so over the estern half. In the southwestern portion where the rains were he heaviest, conditions were quite favorable until near the close f the month.

It was the second warmest July in the past 27 years, and the inth driest which Missouri has experienced since 1867. The temperature excess, about 2° a day. was less in the southwest plain, here the greatest rainfall occurred, and it was the greatest in he southeast lowlands, over 5° a day, where it was very dry; in he remainder of the State the daily excess averaged a little less han 4°. The maximum temperature, 109°, has been equaled wice in the past 27 years, and exceeded three times during the ame period, the absolute maximum during that period being 16 degrees, in 1901.

July usually is a month of good rains. The average for bout 47 years is near 4.20 inches. Since 1867 twenty Julys ave given rains above the normal, and 24 below normal, while he remainder have been about normal.

The rains of the month were in the form of local showers, ith some heavy amounts in the western half of the State during the first week. The deficiency in moisture was noticeable in ll divisions except the southwest. In the southeast lowlands it as the driest July of which there is any record.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 tations reporting was 29.99 inches, which is 0.01 inch above ormal. The highest was 30.19 inches, at Hannibal, St. Louis nd Springfield on the 19th, and the lowest was 29.61 inches, at t. Joseph and Kansas City on the 15th. The greatest local ange was .57 inch, at St. Joseph.

TEMPERATURE.

The monthly mean for the State, as determined from the ecords of 66 stations, was 80.5°. The mean departure from he normal for 49 stations having 10 or more years records was lus 3.7°, which is the second largest excess in 27 years, or 4.7° ess than in July, 1901, and 0.3° greater than in 1913.

The highest local monthly mean, 84.6° occurred at Caruthersville, and the lowest, 77.6°, at Cassville. The highest temperature recorded during the month was 109°, at Grant City on he 12th, and the lowest was 45°, at Ironton on the 30th. Maximum temperatures were 100° or higher on an average of days over the northeast plain, 11 in the southeast lowlands, 4 over the Ozark plateau, 3 in the southwest lowlands, and 4 over he northwest plateau.

HUMIDITY.

At Columaia the average relative humidity, 7 a. m., was 8 per cent; at Hannibal, 80 per cent; at Kansas City, Springield, and St. Louis the average of the 7 a. m. and 7 p. m. readngs was 59, 64 and 54 per cent, respectively.

PRECIPITATION.

The average precipitation for the State, 79 stations reporting, was 2.67 inches. The departure from the normal for 64 tations having 10 or more years records was minus 1.66. The month was drier than the same month in 1913, but was not as dry as July, 1901. The monthly averages and departures for the five divisions of the State were as follows: northeast plain, 2.70 inches, deficiency 1.35 inches; southeast lowlands, 0.84 inch, deficiency 3.40 inches; Ozark plateau, 2.78 inches, deficiency 1.77 inches; southwest plain, 4.25 inches, deficiency 0.26 inch, and northwest plateau, 2.12 inches, deficiency 2.42 inches.

The greatest local monthly precipication was 7.61 inches, at Warsaw, and the least, 0.34 inch, at Cardwell. The greatest amount recorded in any 24 consecutive hours was 4.45 inches, at Warsaw on the 3rd.

The average number of days with 0.01 inch or more of precipitation was 7.

WIND.

The prevailing winds were from the southwest. The highest velocity recorded was 36 miles from the southeast at Kansas City on the 21st. The average hourly velocities at stations equipped with anemometers were as follows: Columbia, 5.1 miles; Hannibal, 6.5 miles; St. Louis, 8.9 miles; St. Joseph, 5.9 miles; Kansas City, 9.7 miles; Springfield, 7.1 miles; Cairo, Ill., 6.3 miles and Keokuk, Ia., 5.5 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 67 or 8 per cent below normal. At Kansas City, the percentage of the possible was 78; Springfield, 61; St. Louis, 67, and at St. Joseph, 76. For the State, the average number of clear days was 17, partly cloudy, 9, and cloudy 5.

MISCELLANEOUS PHENOMENA.

Hail—15th and 16th.

Halos, Solar—1st, 5th, 6th, 12th, 20th and 30th.

Thunderstorms—2nd, 4th, 5th, 7th, 8th, 12th, 15th, 16th, 17th, 18th, 25th, 26th, 30th and 31st.

ERRATA FOR JUNE, 1914.

Appleton City—Lowest temperature published as 48, should be 58 on the 17th.

COMPARATIVE DATA FOR JULY

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	79.3	+2.3	111	50	3.31	−0.98	......	7
1889	77.1	+0.1	107	46	3.75	−0.54	......	8
1890	79.6	+2.6	106	52	2.98	−1.31	......	5
1891	72.7	−4.3	103	40	3.55	−0.74	......	8
1892	75.8	−1.2	101	45	4.99	+0.70	4.75	8
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	8
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	5
1895	74.4	−2.6	106	45	6.79	+2.50	6.52	10
1896	77.3	+0.3	108	48	5.87	+1.58	8.00	9
1897	78.7	+1.7	106	48	3.22	−1.07	4.05	6
1898	76.1	−0.9	104	42	5.58	+1.29	8.15	9
1899	76.0	−1.0	102	43	4.51	+0.22	4.48	9
1900	76.9	−0.1	102	46	4.11	−0.18	7.03	8
1901	85.4	+8.4	116	46	2.02	−2.27	3.78	5
1902	77.0	0.0	103	50	4.59	+0.30	5.30	8
1903	77.4	+0.4	102	51	3.22	−1.07	3.26	8
1904	74.2	−2.8	100	47	4.65	+0.36	4.15	10
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	12
1906	74.7	−2.3	100	48	3.53	−0.76	4.46	8
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	8
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	8
1909	76.7	−0.3	102	41	6.41	+2.12	10.71	10
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	9
1911	78.0	+1.0	113	43	3.95	−0.34	4.20	8
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	7
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	7
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	7

Climatological data for July, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	...	...	...	...	...	...	...	4.49	+0.13	2.30	0	7	21	0	10	sw.	C. Randecker.
Brunswick	Chariton	652	36	78.8	+1.9	98	27	61	2	27	3.57	−1.03	1.51	0	7	18	3	10	e.	Louis Benecke.
Columbia	Boone	784	25	80.0	+2.6	100	16	59	20	32	1.70	−1.95	0.66	0	8	9	12	10	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	80.0	+2.8	102	16	61	20†	31	2.15	−1.75	0.73	0	8	21	4	6	...	Prof. T. B. Smith.
Fulton	Callaway	818	24	80.0	+3.3	103	27	56	20	39	3.10	−1.57	1.84	0	8	...	...	...	...	L. A. Higley.
Glasgow	Howard	618	36	...	...	...	...	...	...	...	5.00	+1.17	2.52	0	7	19	3	9	e.	J. J. Shaughnessy.
Gorin	Scotland	700	29	...	...	...	...	...	...	...	1.90	−2.69	1.21	0	6	13	14	4	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	80.0	+2.6	101	11	56	19	32	0.87	−2.88	0.27	0	7	19	9	3	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	...	...	...	...	...	...	...	3.05	−0.97	1.38	0	9	14	6	11	sw.	C. T. Mauslund.
Jefferson City	Cole	628	33	80.4	+2.5	106	26	58	2†	41	2.13	−1.60	1.15	0	10	19	0	12	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	...	...	...	...	...	...	...	4.25	...	2.06	0	7	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	500	37	...	...	104	16	54	20	42	1.84	−1.69	0.80	0	5	...	...	...	...	J. T. Farrell.
Macon	Macon	881	2	79.8	...	99	10†	56	30	34	2.48	...	0.81	0	7	15	11	5	sw.	John A. Cook.
Mexico	Audrain	797	37	80.6	+3.7	103	27	58	20†	35	5.01	+0.96	1.84	0	12	17	1	13	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	82.6	+5.1	106	11	61	2	34	1.20	−3.62	0.71	0	4	5	21	5	sw.	E. E. Steines.
Palmyra	Marion	652	3	81.6	...	106	11	57	19	36	2.16	...	1.47	0	5	18	10	3	sw.	W. B. Markell.
St. Catharine	Linn	914	1	79.4	...	99	16	57	19	26	2.46	...	1.10	0	8	15	16	0	sw.	L. D. Baker.
St. Charles	St. Charles	614	37	82.6	+5.2	107	11	62	2†	35	1.47	−2.07	0.78	0	5	11	15	5	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	83.1	+4.0	102	11	65	30	26	1.52	−1.91	0.69	0	7	20	8	3	nw.	U. S. Weather Bureau.
St. Louis(2)	do.	578	3	83.1	...	104	11	64	1	29	2.12	...	0.86	0	8	16	11	4	se.	St. Louis University.
Steffenville	Lewis	576	22	82.6	+5.6	105	27	54	19	40	2.10	−2.99	0.80	0	6	17	14	0	s.	Frank Hall.
Sublett ‡‡	Adair	1,000	34	79.8	+7.9	105	11	52	19†	41	6.00	+1.27	4.00	0	2	9	20	2	sw.	Lewis Spriggs.
Unionville	Putnam	1,072	22	78.2	+1.3	103	12	52	18	36	4.38	0	1.40	0	8	11	12	8	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	81.6	...	104	11†	51	19	39	2.61	...	1.10	0	4	17	3	11	n.	C. B. Ellis.
Warrenton	Warren	865	25	81.6	+4.3	104	11†	60	30	36	1.55	−2.46	1.05	0	6	14	8	9	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	5	...	...	...	...	...	...	...	0.87	...	0.50	0	4	25	2	4	n.	D. L. Albert.
Cardwell	Dunklin	...	3	82.4	...	105	16	53	20	36	0.34	...	0.30	0	2	28	2	1	s.	E. M. Perry.
Caruthersville	Pemiscott	...	24	84.6	+5.0	104	27	64	30	32	0.88	−2.82	0.61	0	3	25	5	1	sw.	H. E. Averill.
Doniphan	Ripley	440	11	82.1	+4.7	104	15†	56	30	40	1.85	−4.56	0.95	0	8	18	4	9	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	83.6	+7.1	108	16	58	20†	40	0.96	−2.81	0.82	0	4	2	25	4	s.	L. M. Bean.
Marble Hill	Bollinger	420	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	...	...	...	...	...	...	...	0.65	−3.70	0.32	0	4	23	1	7	s.	Miss Josie Smith.
Cairo, Ill.	Alexander, Ill	359	43	83.2	+4.6	101	12	64	19	28	0.35	−3.10	0.32	0	3	14	10	7	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	19	...	...	...	...	...	...	...	1.90	−1.54	1.20	0	3	13	4	14	e.	G. V. Randolph.
Belle	Maries	1,000	23	81.4	+4.3	106	15	58	20	37	3.27	−1.02	1.60	0	5	3^{a}	27^{a}	0^{a}	s.	A. J. Wofford.
Birchtree	Shannon	1,200	21	80.3	+7.6	103	16	57	30	36	1.43	−3.36	0.52	0	4	24	5	2	w.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	79.0	+2.1	100	28	59	30	38	2.91	−0.99	1.50	0	6	20	6	5	ne.	A. C. Fink.
Cassville	Barry	1,500	4	77.6	...	100	28	60	19	35	4.31	...	1.20	0	11	21	7	3	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Roy W. Reed.
Dean.‡‡	McDonald	1,000	16	78.0^{h}	+0.3	98	28	61	20	28	5.67	+1.39	1.44	0	8	15^{g}	1^{g}	8^{g}	...	H. E. Dean.
Duncan	Webster	...	2	78.6	...	103	15†	56	30	38	2.63	...	0.88	0	8	17^{a}	6^{a}	7^{a}	s.	C. A. Mingus.
Eldon	Miller	934	3	81.0	...	106	28	57	30	39	1.92	...	0.93	0	8	7	22	2	sw.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	80.1	...	101	16†	62	2	33	0.40	...	0.20	0	2	22	9	0	sw.	R. C. Walton.
Gano ‡‡	Dent	...	11	81.8	+5.4	106	16	56	30	40	1.91	−2.74	0.67	0	6	21	7	3	s.	A. C. Leach.
Goodland	Iron	1,000	10	...	...	...	...	47	30	...	1.55	−3.38	1.45	0	2	8	20	3	s.	F. M. Adams.
Hollister	Taney	1,000	5	78.0	...	98	28	60	19	28	4.55	...	1.55	0	8	21	0	10	sw.	W. P. Chapmann
Houston	Texas	1,280	23	79.6	+3.8	103	16	56	30	36	0.96	−3.80	0.30	0	4	22	6	3	sw.	R. F. Harmon.
Ironton	Iron	925	37	80.6	+5.0	107	16	45	30	51	0.85	−3.72	0.35	0	7	5	21	5	s.	W. H. Dehno.
Koshkonong	Oregon	911	15	82.9	+5.2	104	16†	64	30	33	1.69	−2.82	0.74	0	7	19	9	3	sw.	J. W. Hitt.
Lebanon	Laclede	1,105	26	80.0	...	106	28	60	2†	38	3.02	−1.66	1.60	0	8	17	4	10	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	79.7	+3.1	99	15†	63	31	27	4.25	−1.42	1.46	0	9	20	2	9	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	79.7	+3 9	102	16	61	18†	35	1.99	−2.69	0.50	0	8	10	11	10	sw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	79.7	+1.9	103	28	62	5†	34	2.90	−2.49	0.65	0	7	21^{a}	2^{a}	7^{a}	sw.	J. R. White & Son.
Neosho	Newton	1,083	32	79.7	+2.3	98	28	61	19	29	6.35	+1.93	1.33	0	12	23	5	3	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	80.8	+3.8	104	16	57	30	37	2.85	−1.29	1.10	0	7	20	8	3	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	78.8	+2.4	97	15	64	21	24	3.35	−1.44	0.84	0	10	16	8	7	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	22	...	...	...	...	...	...	...	3.37	−0.79	1.50	0	6	19	6	6	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	81.1	...	102	16	59	2	32	4.56	...	1.51	0	8	19	6	6	sw.	Darby Fruit Farm.
Appelton City	St. Clair	853	24	78.4	+0.4	97	10†	55	1	33	4.28	−1.24	1.50	0	8	12	15	4	s.	Mark Brown.
Clinton	Henry	800	28	80.1	...	102	28	58	2	38	2.33	−2.26	0.85	0	6	17	12	2	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	79.6	+2.2	102	16	61	2†	36	5.45	+1.55	2.86	0	9	12	1	18	sw.	A. J. Sharp.
Joplin	Jasper	975	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Joplin High School.
Lamar	Barton	964	34	81.4	+3.3	104	28	63	2	32	4.33	−0.13	1.19	0	8	14	4	13	s.	E. H. Adams.
Lamonte	Pettis	863	27	79.6	...	101	16	56	30	39	3.50	−1.20	1.60	0	7	16	10	5	sw.	J. Ed. Hall.
Marshall	Saline	779	24	79.6	+2.8	103	16	57	30	35	3.33	−1.10	1.61	0	8	16^{c}	7^{c}	5^{c}	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	...	...	...	...	...	...	...	4.58	+0.70	1.65	0	10	13	15	3	se.	C. Jewell.
Osceola	St. Clair	738	16	...	...	...	...	...	...	...	3.97	−0.53	2.05	0	8	16^{a}	1^{a}	13^{a}	sw.	W. E. Matthews.
Warrensburg	Johnson	883	35	81.0	+2.4	104	16	59	1	36	2.78	−1.46	1.55	0	9	17	10	4	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	80.6	+2.6	104	28	56	30	39	7.61	+3.04	4.45	0	9	14	16	1	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	...	30	80.9	+3.7	105	16	58	18	34	1.77	−2.89	0.60	0	5	25	5	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	25	80.6	+5.4	101	27	58	2†	31	1.08	−3.62	0.46	0	8	11	17	3	sw.	M. H. Moulton.
Conception	Nodaway	982	31	79.2	+3.6	100	12	58	18	27	0.96	−3.28	0.65	0	2	16	13	2	se.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	80.6	+5.0	109	12	57	2†	37	1.20	−3.82	0.62	0	4	25	1	5	s.	W. H. Campbell.
Kansas City	Jackson	963	27	80.8	+3.2	101	16	62	31	26	2.81	−2.03	2.25	0	7	12	15	4	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	23	80.1	+3.6	100	27	60	18	24	1.49	−2.76	0.60	0	6	16	9	6	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	79.5	+3.0	100	16	61	2†	29	5.74	+0.64	2.80	0	6	19	3	9	s.	J. W. Keithley.
Liberty	Clay	864	27	80.9	+3.6	104	16	59	2	31	3.82	−0.92	1.15	0	6	19	10	2	s.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	79.8	+3.9	106	12	57	20	41	2.85	−2.71	0.74	0	7	25	3	3	s.	J. R. Brink.
Oregon	Holt	1,113	60	79.4	+2.6	100	16	60	18	26	2.29	−2.26	1.34	0	7	20	8	3	s.	Tom Curry.
Pattonsburg	Daviess	...	5	...	...	...	...	...	...	...	1.72	...	0.68	0	5	21^{c}	3^{c}	2^{c}	sw.	William Burton.
St. Joseph	Buchanan	825	13	80.8	...	102	16	60	20	31	1.38	−2.60	1.17	0	7	16	12	3	se.	U. S. Weather Bureau
Tarkio	Atchison	...	3	79.6	...	104	12	56	20	33	1.42	...	0.72	0	6	15	13	3	sw.	John F. Frazier
Trenton	Grundy	812	20	81.0	+4.6	100	16	60	18†	34	1.12	−2.85	0.83	0	5	18	7	6	s.	W. H. Estes.
State means and extremes		...	...	80.5	+3.7	109	12	45	30	51	2.69	−1.66	4.45	0	7	17	9	5	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for July, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
onville ‖	Missouri	2.30			.60				1.11									.26	.08			.04	.10										4.49
unswick ‖	Grand				.83			.58	.14					.31				1.51				.17										.03	3.57
lumbia***	Missouri	.14		.09	T.			.66						T.			.43	.13			.05	.08				.12					T.	T.	1.70
yette	do	.73		.62			.08	.04					T.				T.	.42	T.		.05	.16										.05	2.15
lton	do	1.84		.01			.02	.05									.20	.56				.40									.02		3.10
asgow ‖	do	2.52	T.		.94				1.24									.18	.06			.02	T.									.04	5.00
rin	Mississippi						1.21	.05					.25					.16				.02										.21	1.90
annibal***	do	.36			T.			T.					T.	T.			.19	.08				.02					.02				.01	.19	0.87
rmann ‖	Missouri	1.38	.12		T.				.34								.01	.84				.02	.10							.16		.08	3.05
fferson City ‖	do	1.15	.05						.25			.01					.05	.30	.08			.03	.20					.01					2.13
ytesville	Chariton			.45		.02	1.04						.55				2.01				.08	.10										T.	4.25
uisiana	Mississippi	.80															.07	.77				.04									.16		1.84
acon	Chariton	.81		T.				.06	.25					.29				.39			T.	T.						.59				.09	2.48
exico ‖	Mississippi	1.84	.03		T			.05	1.65					.01				.33	.18			.03	.22				.01			.63		.03	5.01
kfield	Meramec	.71						.10	T.								T.	.34				T.										.05	1.20
lmyra	Mississippi							.09						.06				.36									1.47					.18	2.16
Catherine	Grand	.30		.06	T.			.15	T.					1.10			.56		T.		.10	.05	T.									.14	2.46
Charles	Missouri	.78						.11	.28									.15											T.		.15		1.47
Louis (1)***	Mississippi	.67						.01	T								.01	.09				T.				.09			.58			.07	1.52
Louis (2)	do	.85						.08	.01								.01	.11								.86			.11			.09	2.12
tenville	do	.60					.80	.03					.48	T.								.04				.15					T.		2.10
blett	do					2.00							4. .0					T.								T.							6.00
ionville ‖	Grand	40						.15	.08					1.25			T.	1.40				.10				.60						.40	4.38
ndalia	Mississippi	1.10						.30											1.07													.14	2.61
arrenton ‖	do	1.05	.02						.03		T.							.31					.03									.11	1.55
Southeast Lowlands.																																	
pe Girardeau ‖	Mississippi		.02									T.							.05								.30		.50			T.	0.87
rdwell	do	T.	.30														T.	T.			T.								.04			T.	0.34
ruthersville	do	.15	.61		T.					T.	T.						T.	T.				T.							.12			T.	0.88
niphan	Black	T.	.02	.02	T.	.95											.25	.15				T.				.12	.04		.30			T.	1.85
ckson	Mississippi	.03																.09										.82				.02	0.96
rble Hill	do																																
w Madrid ‖	do	.02										.30			T.				.32										.01			T.	0.65
iro, Ill***	do	T.	.02		.01						.32			T.			T.	T.								T.		T.				T.	0.35
Ozark Plateau																																	
lington	Gasconade	1.20	.12																				.58										1.90
gnell ‖	Osage																																
lle	Meramec	1.30		.05				.30									.02									1.60							3.27
rchtree	Black	.28	.20					.43																		.52							1.43
livar	Osage	1.50		.50	.14			.25										.10				.42											2.91
ssville	White	.07		1.20	.62	.60	.02	.15	.02	.06								T.	T.	.36	.40	.81			T.								4.31
ocker	Gasconade	1.13	.15					.15																									
an	Neosho	.17		.66	1.44	.44	1.35		.04												.92											.65	5.67
ncan	Osage	.48		.15	.10	.01		.88		T.		T.						.37		T.		.38							T.			.26	2.63
don	do	.93		.34				.02										.02			T.	.44						.04	.09			.04	1.92
ant City	Black	.20									.20																						0.40
nno	Meramec	.67				T.		.66			.32							.08				T.				.10			.08				1.91
odland	Black				1.45													.10															1.55
llister	White			1.00	.40	.65	.10	1.55	.30											.15												.40	4.55
uston	Gasconade	.24		.15				T.				T.						.27				.30			T.								0.96
onton ‖	Mississippi	T.	.35		.06					.03		.25						.02	T.			T.					T.		.08			.06	0.85
shkonong	Black	.12	.25	.13	.02			.18										.25											.74				1.69
banon	Osage	1.60			.38								.02					.28	.03			.03	.40							.28			3.02
ckwood	do	.53		.53	.35	.12	.75	1.46										.11		T.		.10										.30	4.25
ountain Grove	White	T.	.37		.31	.06			.38		.07								.14				.16				.50						1.99
ount Vernon	Neosho	.46			.20	.48	.13	.65												T.	T.	.63										.35	2.90
osho	do	.15		1.04	1.08	.64	.03	.60										.02	.01	.53	.89	.03										1.33	6.35
lla	Meramec	1.10	T.		.09		.67		.20						T.			.04					.28				.47						2.85
ringfield ***	White	.77		.52	.14	.29	.03	.68	T.			T.						.23		T.	T.	.44				.20						.05	3.35
heatland	Osage	1.50		.60	.10										.50						.41											.26	3.37
Southwest Plain.																																	
moret	Osage	1.51		1.51	.04	.05	.37	.50						T.				.11	T.		T.	T.										.47	4.56
pleton City	do	1.50		17	.05	.31	1.02	.81											.35													.07	4.28
inton	do			.85			.50	.30													.20	.23										.25	2.33
rrisonville ‖	do	2.86			.12		.72	1.11							.02			.35	.01		T.	.20										.06	5.45
plin	Neosho																																
mar ‖	do	.63			.34	1.19	.16	1.11			T.										T.	.06	.06									.78	4.33
monte	Missouri	1.60		.25		T.	.05	.60						T.			T.	.15		T.	T.	.10							T.			.75	3.50
arshall	do	1.61		T.	.10	T.	T.	.18	.07					T.			T.	.33	T.		.02	.95										.07	3.33
vada	Osage	1.65		.51	.44	.04	.35	.45	.18										T.			.46				T.			.22		.28		4.58
ceola ‖	do	2.05			.23	.07	.10	.29	.47									.21				.55											3.97
arrensburg	Missouri	1.55		.09		.10	.19	.22						T.				.18			.02	.19	T.									.24	2.78
arsaw	Osage	1.45		4.45			.03	.43										.08		T.	.09	.43							.38			.27	7.61
Northwest Plateau.																																	
valon	Grand							.35									.45				.25							.60				.12	1.77
thany	do	.06		.05	T.		.30	.04						.05				.46							.02						T.	.10	1.08
nception	Missouri						.65						T.				T.		T.						T.							.31	0.96
ant City	Grand			T.	.07	.24							T.	.27			.62	T.	T.		T.	T.		T.							T.	T.	1.20
nsas City***	Missouri			T.		T.	2.25	T.					T.	.11			.05	.05	T.	T.	.06	.10						T.				.19	2.81
idder	Grand						.60	.42										.08		.02		.12										.25	1.49
xington ‖	Missouri	1.69					.37	2.80										.54				.04										.30	5.74
berty	do	.65		.45		.12	.75	1.15													T.											.70	3.82
aryville ‖	do	.63					.12	.72						.05				.29								.30						.74	2.85
regon	do						1.34						.48	.05			.25		.04		T.	.03									T.	.10	2.29
attonsburg ‖	Grand	.60						.68						T.				.19				.07										.18	1.72
Joseph***	Missouri	.03					1.17						.01				.01		T.		.05	.01										.10	1.38
rkio	do						.64						.01						.02					.02	.01						.72		1.42
renton	Grand						.14	T.									.83		T.		.03							T	.02		.10		1.12

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at that time of observation.

T. Trace, or less than 0.01 inch.

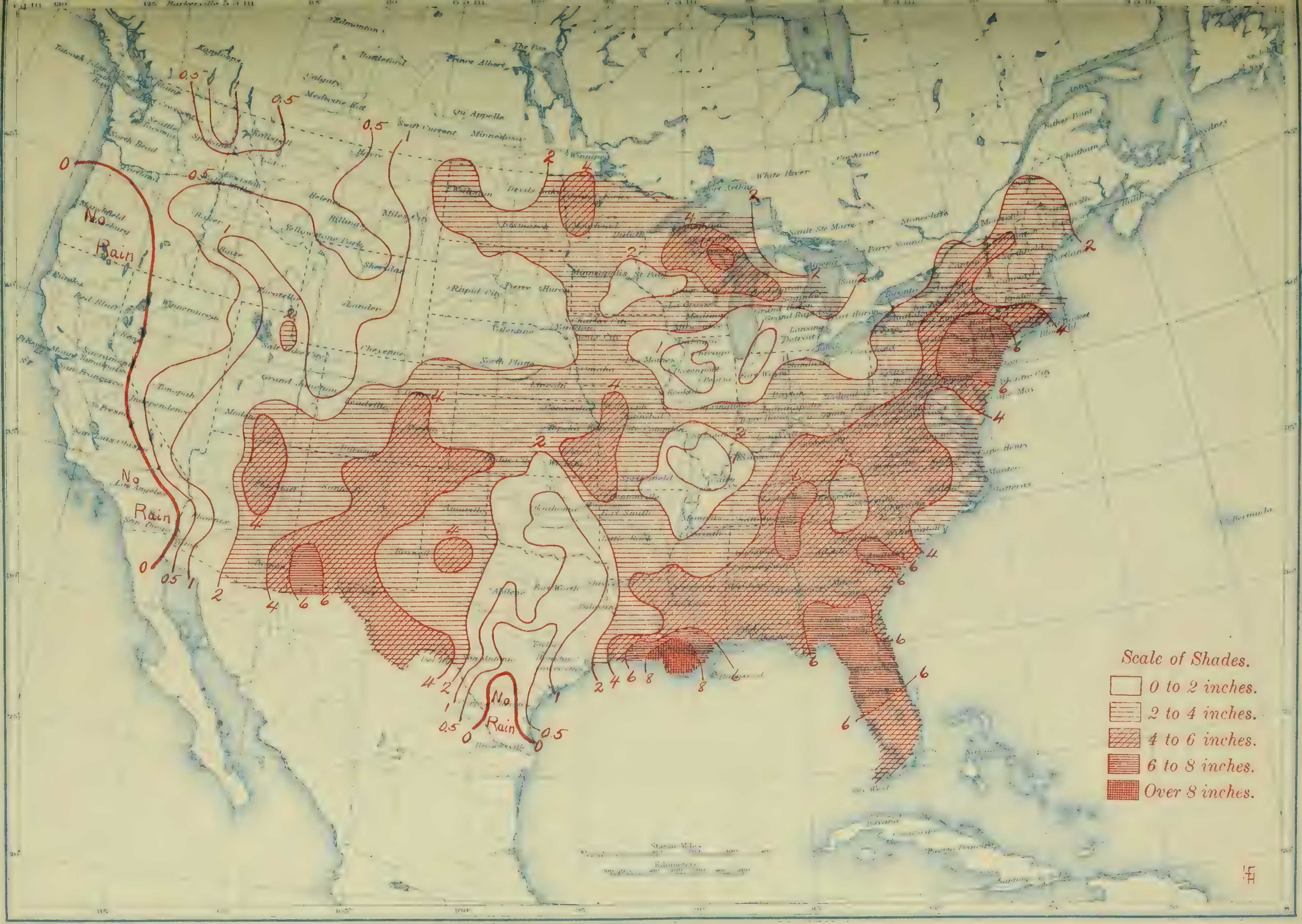
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

Daily temperatures for July, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Northeast Plain.																																	
Brunswick §§	Maximum	80	85	83	87	88	83	85	90	92	94	91	95	91	90	92	96	85	80	85	81	86	95	95	92	92	94	[illegible]	94	89	82	80	88
	Minimum	65	61	64	66	69	72	71	69	69	73	75	75	72	71	70	72	70	62	62	63	65	68	73	72	[illegible]	71	73	73	68	62	64	68
Columbia	Maximum	79	86	84	88	91	89	85	91	91	95	96	95	94	90	97	100	85	82	88	87	81	98	99	96	94	97	95	94	89	90	78	90
	Minimum	65	61	68	66	68	72	72	70	71	72	74	74	77	69	70	74	67	63	66	59	67	66	77	72	71	73	73	75	68	63	65	69.
Fayette	Maximum	79	87	84	87	90	87	83	90	93	97	96	96	94	81	96	102	86	81	87	85	84	97	98	96	95	98	99	97	92	92	77	90
	Minimum	64	62	65	68	69	72	71	69	71	71	75	73	77	72	69	77	67	62	65	61	66	71	74	72	70	72	75	76	68	61	63	69
Hannibal	Maximum	83	88	85	88	93	94	88	92	91	98	101	97	91	88	95	99	86	79	88	91	79	96	99	98	94	96	100	94	86	87	83	91
	Minimum	65	60	63	68	68	70	75	72	69	69	70	74	79	72	66	73	69	62	59	59	72	70	78	74	73	72	74	75	65	63	63	68
Jefferson City §§	Maximum	81	90	90	91	95	94	88	96	98	102	99	101	100	95	100	104	86	85	74	72	91	103	105	104	98	106	105	100	92	95	78	94
	Minimum	61	58	62	64	64	68	69	66	68	69	72	69	75	67	66	75	68	61	64	58	66	62	72	69	71	67	69	74	66	59	65	66.
Macon	Maximum	86	88	87	89	93	89	88	91	97	99	98	98	90	89	95	98	86	81	87	88	93	98	97	97	96	93	96	96	90	90	[illegible]	91.
	Minimum	65	61	68	65	69	69	71	69	69	73	73	74	71	69	60	70	69	59	58	60	67	70	74	74	71	74	74	73	64	56	58	67
Mexico §§	Maximum	80	89	87	91	95	91	89	94	96	99	101	98	97	94	97	101	87	83	91	93	83	100	102	100	98	100	103	94	[illegible]	90	[illegible]	93.
	Minimum	63	61	63	65	68	71	72	70	70	70	73	75	77	70	66	69	70	60	62	58	63	67	70	73	73	71	71	73	64	58	62	67
Oakfield	Maximum	76	88	89	93	95	96	92	98	100	102	106	102	103	98	100	101	90	85	90	97	88	102	103	102	101	101	105	95	86	92	82	95
	Minimum	63	61	66	68	68	70	73	70	73	73	72	74	79	71	71	80	70	63	62	70	62	68	75	74	75	72	77	74	65	62	62	69
St. Catharine	Maximum	82	85	85	86	90	87	85	89	94	97	97	98	91	87	90	99	87	78	83	84	84	93	95	94	94	95	98	95	88	87	81	89.
	Minimum	65	60	64	65	69	70	78	79	70	71	71	73	67	69	69	77	67	60	57	60	67	73	74	73	70	72	73	75	66	63	60	68.
St. Louis (1)	Maximum	76	86	89	89	95	95	91	96	95	97	102	100	100	92	96	98	86	81	85	94	90	97	100	99	97	96	98	94	86	88	[illegible]	92
	Minimum	65	67	71	72	73	76	73	74	77	77	76	81	82	78	75	77	72	68	67	70	74	72	79	80	78	75	81	72	68	65	67	73
Sublett	Maximum	86	96	91	94	98	92	90	95	100	101	105	101	90	90	95	98	87	83	85	89	90	98	100	99	97	97	102	95	91	90	86	94.
	Minimum	65	55	60	64	64	68	67	68	68	71	74	78	67	70	66	71	66	56	52	57	52	72	75	70	67	67	71	72	63	57	61	65
Unionville §§	Maximum	76	88	89	94	95	90	88	94	97	101	100	103	90	88	94	101	86	80	85	86	88	96	100	94	95	96	100	95	90	85	84	91.
	Minimum	57	55	60	64	66	68	70	62	66	65	70	73	66	62	64	70	60	52	54	62	66	67	73	74	68	70	71	76	60	57	56	64.
Warrenton §§	Maximum	87	89	90	92	96	94	86	96	97	100	104	102	101	96	103	101	87	83	94	97	85	103	104	103	97	99	104	95	90	93	84	93.
	Minimum	65	61	64	68	70	70	75	70	71	72	71	76	80	70	68	78	70	62	62	61	70	67	72	73	75	71	77	75	65	60	62	69.
Southeast Lowlands.																																	
Cardwell	Maximum	100	86	91	96	96	95	95	97	98	98	99	103	103	102	104	105	95	98	98	89	97	97	97	97	100	102	104	100	93	92	86	97.
	Minimum	68	68	65	66	66	67	67	67	68	68	68	67	72	78	70	78	80	68	66	53	62	65	65	65	66	68	76	75	68	61	60	67.
Caruthersville	Maximum	103	84	92	93	97	99	99	97	99	98	98	102	102	102	102	102	93	98	93	97	100	97	96	97	98	101	104	103	94	94	84	97.
	Minimum	73	69	70	70	76	71	70	71	70	70	70	72	75	75	73	80	80	72	68	65	70	71	70	71	75	75	76	78	74	61	60	71.
Doniphan	Maximum	89	90	93	90	96	92	91	96	98	98	101	102	103	99	104	104	96	96	89	97	94	100	100	98	99	104	103	101	93	92	[illegible]	96.
	Minimum	69	69	68	68	69	67	69	67	68	69	72	68	72	74	69	73	75	65	59	57	64	65	65	67	70	70	71	73	72	56	[illegible]	67.
Jackson	Maximum	83	93	96	92	98	100	101	99	101	101	102	105	105	101	103	108	97	91	91	98	94	98	102	94	[illegible]	102	101	97	90	95	[illegible]	97.
	Minimum	79	68	67	71	67	65	69	69	69	72	68	71	76	76	70	81	75	65	60	58	72	68	69	69	74	72	72	73	70	58	66	69
Marble Hill	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ozark Plateau.																																	
Birchtree	Maximum	83	88	87	....	92	88	85	90	92	95	98	98	100	98	100	103	96	93	89	93	84	96	98	94	92	97	99	106	94	93	82	93.
	Minimum	66	63	67	....	67	65	70	68	67	69	71	67	71	73	69	71	71	64	65	62	67	65	68	65	68	68	76	73	70	57	68	67.
Cassville	Maximum	91	86	81	71	76	86	88	88	90	91	94	94	94	96	96	94	93	89	77	79	79	94	91	88	92	91	96	100	94	[illegible]	[illegible]	89.
	Minimum	66	64	64	65	68	64	66	65	66	67	65	68	67	67	68	73	73	64	60	64	63	61	65	67	64	64	66	65	65	71	72	66
Duncan	Maximum	80	86	81	76	81	90	86	87	92	94	95	97	99	95	103	101	89	88	85	83	80	96	....	96	95	97	100	103	92	92	78	90.
	Minimum	64	65	63	63	63	65	70	65	67	68	71	68	73	70	65	76	70	61	65	66	63	67	....	65	70	66	67	73	69	56	63	66.
Eldon	Maximum	77	90	85	90	91	90	89	95	97	98	101	99	98	98	102	104	91	92	91	89	88	100	100	98	86	100	103	106	98	96	80	94.
	Minimum	63	59	63	64	65	71	70	67	69	71	73	72	75	68	67	79	71	60	65	60	63	70	73	70	72	69	72	73	68	57	[illegible]	67.
Fruit City	Maximum	80	85	80	85	81	90	85	91	94	92	91	95	96	97	98	101	95	91	87	95	89	98	98	97	97	98	101	99	91	91	79	91.8
	Minimum	63	62	64	72	68	67	67	67	70	70	68	68	74	72	71	75	71	70	65	67	68	70	73	64	67	65	70	77	69	63	64	68.4
Gano	Maximum	76	89	91	91	100	92	91	96	99	99	100	100	100	95	103	106	95	99	91	98	82	103	102	102	99	100	104	100	94	96	[illegible]	95.9
	Minimum	61	63	69	66	66	62	70	66	70	70	71	75	76	69	68	78	72	63	64	57	67	65	70	68	72	69	73	73	66	56	66	67.
Hollister	Maximum	88	84	82	84	80	82	84	86	88	90	92	94	92	94	96	94	90	90	80	80	78	92	90	88	90	92	94	98	94	90	76	88.1
	Minimum	62	64	62	64	62	64	62	66	68	70	72	74	74	72	70	72	72	70	60	62	64	66	68	70	72	75	72	70	74	64	64	67.
Ironton §§	Maximum	83	92	93	95	96	96	93	98	102	100	103	100	104	99	103	107	96	94	92	98	93	100	103	100	95	104	104	100	93	96	77	97.0
	Minimum	65	67	57	67	65	64	65	64	64	66	67	67	67	70	64	73	74	56	61	49	64	60	64	62	68	66	69	73	66	45	64	64.3
Lebanon	Maximum	76	88	81	81	90	89	89	94	96	97	99	97	97	97	103	103	89	83	87	83	80	99	99	96	97	99	103	106	95	96	73	92.3
	Minimum	64	60	63	63	63	70	70	66	69	71	70	72	78	67	65	74	71	60	63	68	67	64	72	68	71	70	71	75	68	62	68	67.
Mountain Grove	Maximum	82	88	86	89	93	89	77	91	93	94	97	97	98	94	100	102	89	90	86	88	84	97	97	94	91	94	99	100	93	92	75	91.6
	Minimum	64	64	65	63	63	68	72	65	70	68	70	69	74	71	65	77	70	61	65	68	65	67	70	66	70	69	69	73	73	61	67	67.8
Neosho	Maximum	92	87	86	78	79	88	88	88	92	93	94	93	93	95	97	96	95	90	86	84	87	97	94	91	90	92	96	98	96	95	92	91.0
	Minimum	67	66	66	66	69	68	68	72	69	69	68	70	73	71	71	78	75	66	61	63	63	68	68	69	69	67	70	69	69	66	66	68.4
Rolla	Maximum	74	90	90	89	94	93	85	95	97	98	98	98	98	95	100	104	87	89	97	94	81	102	102	99	96	99	101	100	94	92	74	93.7
	Minimum	63	64	64	66	67	68	70	63	69	71	73	70	74	70	69	79	75	62	60	59	62	65	73	69	74	69	72	75	67	57	68	68.0
Springfield	Maximum	78	83	78	73	76	82	81	86	89	90	93	92	92	90	97	95	84	86	80	80	80	94	91	86	89	90	94	96	91	90	74	86.5
	Minimum	64	66	68	67	68	69	68	69	72	74	74	74	75	74	73	81	73	68	68	71	64	71	73	74	73	71	74	77	74	68	66	71.0
Southwest Plain.																																	
Amoret	Maximum	79	87	86	82	83	88	90	91	94	95	94	97	95	96	100	102	92	86	86	86	91	100	100	100	94	97	99	101	99	96	95	93.0
	Minimum	65	59	66	67	67	70	69	67	70	72	71	71	75	69	71	78	69	62	67	79	70	69	72	68	67	68	72	71	72	64	69	69.2
Clinton	Maximum	90	93	82	85	89	89	85	92	96	98	99	100	97	94	98	100	88	90	98	85	90	101	100	95	97	....	....	102	95	98	87	93.6
	Minimum	60	58	61	62	61	70	60	68	72	73	71	71	75	69	68	80	68	63	62	63	65	65	65	68	70	....	....	70	70	60	64	66.6
Harrisonville §§	Maximum	88	87	81	86	84	88	86	88	93	96	96	96	94	89	97	102	85	82	81	81	85	99	98	91	93	96	101	98	93	94	77	90.5
	Minimum	65	61	64	68	69	72	70	68	68	73	73	73	76	70	61	74	68	66	65	62	65	70	72	68	69	70	74	73	72	65	63	68.6
Lamar §§	Maximum	80	89	85	76	82	89	87	90	95	92	96	96	98	94	102	100	88	90	81	85	87	100	98	93	94	99	102	104	98	97	84	92.0
	Minimum	66	63	70	68	69	71	69	70	70	71	75	73	74	71	77	75	75	68	67	70	70	68	73	68	73	71	73	72	76	71	69	70.8
Lamonte	Maximum	86	88	83	88	93	85	86	92	95	95	92	95	94	95	96	101	90	83	87	86	85	91	95	96	97	97	100	99	93	95	80	91.5
	Minimum	61	62	59	65	65	72	69	69	70	70	70	70	76	66	65	78	68	65	64	57	66	74	76	66	73	72	69	70	70	56	63	67.6
Marshall	Maximum	81	88	85	90	90	81	87	91	94	97	97	98	94	93	96	103	92	85	89	82	89	97	97	96	94	103	97	....	91	92	82	91.7
	Minimum	64	59	64	66	67	71	70	68	71	72	72	70	75	69	68	79	64	61	64	59	61	69	73	69	69	71	75	....	68	57	64	67.6
Warrensburg	Maximum	81	89	87	90	87	90	88	91	94	97	98	98	93	93	99	104	94	85	89	82	81	100	106	97	96	100	102	100	94	96	83	92.9
	Minimum	59	64	64	65	66	71	69	68	72	74	75	73	76	70	69	81	69	63	62	62	66	74	75	71	70	72	75	74	71	60	62	69.1
Warsaw	Maximum	77	89	83	87	90	87	85	93	95	98	99	98	97	92	100	102	92	83	83	82	86	99	99	97	92	99	102	104	92	95	82	92.2
	Minimum	65	68	65	67	65	70	70	75	75	76	71	72	76	68	66	80	72	61	66	62	63	71	72	69	73	69	69	70	71	56	62	68.9
Northwest Plateau.																																	
Avalon	Maximum	83	90	88	92	92	85	87	93	96	99	98	100	96	96	97	105	89	81	91	84	87	100	101	99	99	100	104	96	92	93	85	93.5
	Minimum	64	62	65	66	68	72	70	65	70	72	71	74	70	68	68	75	69	58	64	63	65	72	73	73	70	72	73	75	67	59	62	68.3
Grant City	Maximum	81	91	91	93	95	87	87	91	98	100	102	109	92	95	98	98	88	75	92	84	98	104	106	90	101	102	104	95	90	88	85	94.0
	Minimum	62	57	66	66	67	72	68	61	67	72	72	74	69	67	69	69	62	57	58	59	62	67	76	75	68	70	83	74	68	67	61	67.3
Kansas City	Maximum	80	83	81	85	84	86	86	86	91	93	95	97	91	90	96	101	86	80	84	80	85	98	97	94	92	95	98	95	90	88	80	89.3
	Minimum	64	67	70	67	69	71	71	68	72	77	78	77	77	74	75	75	70	67	66	69	70	75	78	76	75	76	79	79	73	71	62	72.2
Kidder §§	Maximum	79	85	82	87	87	82	85	87	94	94	93	94	88	89	92	98	84	77	86	82	86	97	99	96	94	97	100	94	89	90	83	89.4
	Minimum	64	62	61	68	72	71	70	65	73	76	75	76	76	73	72	78	65	60	67	63	70	74	77	78	74	77	76	78	70	69	62	70.8
Lexington §§	Maximum	81	86	86	88	89	83	86	90	93	95	94	95	93	91	94	100	87	84	86	79	85	96	95	92	92	94	97	95	90	91	80	89.9
	Minimum	61	61	63	68	66	72	70	67	71	72	72	75	77	70	67	81	69	61	64	61	70	74	75	73	68	71	71	74	71	62	63	69.1
Marysville §§	Maximum	86	89	91	93	92	88	87	92	97	98	100	106	94	95	98	99	90	75	92	82	93	102	104	96	100	100	104	98	93	93	87	94.0
	Minimum	59	58	60	60	62	71	67	60	66	69	72	75	70	67	67	71	61	58	59	57	60	61	74	73	69	70	72	73	70	65	61	65.7
Oregon	Maximum	82	86	85	88	88	88	84	87	93	95	91	98	90	90	93	100	86	79	85	77	88	98	97	97	94	96	98	97	91	90	84	90.3
	Minimum	64	61	65	67	68	70	68	61	68	74	73	73	71	67	70	76	65	60	62	61	70	73	75	73	69	72	74	74	72	68	62	68.6
St. Joseph	Maximum	81	86	85	88	88	89	86	89	94	95	96	99	90	91	95	102	86	80	87	76	90	99	100	96	95	97	100	99	92	91	87	91.3
	Minimum	64	61	65	68	69	71	70	65	70	73	76	77	76	70	72	71	69	63	66	60	72	76	78	76	71	75	77	76	73	69	63	70.4
Trenton	Maximum	82	87	90	89	91	90	87	90	95	97	95	99	91	91	94	100	98	81	86	88	87	98	98	97	95	96	99	97	94	89	87	92.4
	Minimum	64	61	64	67	70	73	71	63	73	73	76	76	73	68	71	78	64	60	60	63	68	73	77	77	74	73	76	77	69	65	62	69.6

^{1}, ^{2}, ^{3}, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain

Stack.
MS

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

AUGUST, 1914

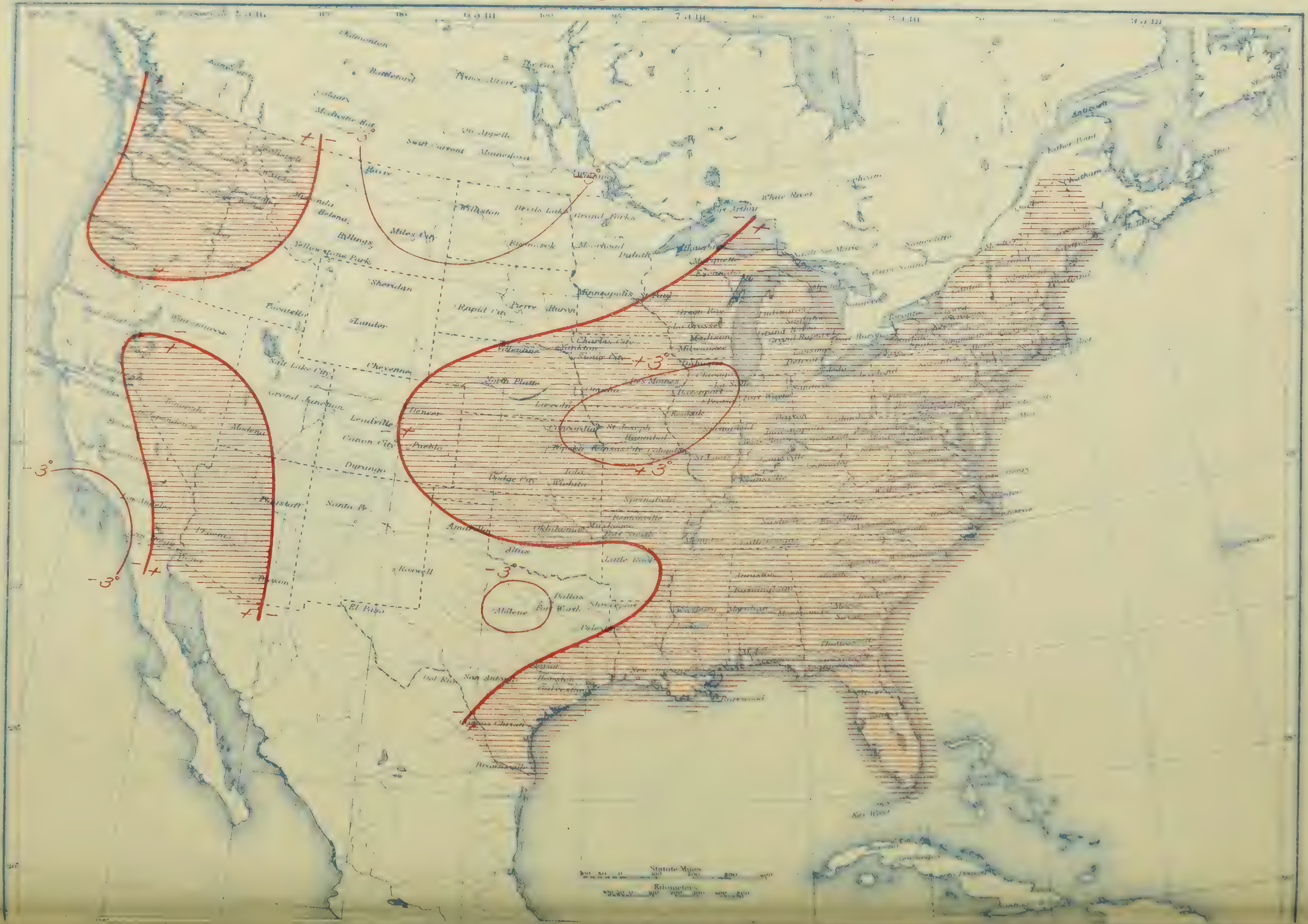
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
OCTOBER 6, 1914.

Departure of the Mean Temperature from the Normal, August, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

L. XVIII. COLUMBIA, MO., AUGUST, 1914. No. 8

GENERAL SUMMARY.

The generally hot and dry weather, with much sunshine, roughout the Section the first half of the month, and abun- nt rains on and after the 19th, thoroughly breaking the severe rought, were the most marked features of the weather during ugust, 1914.

The rains put the soil in fine condition for plowing, which, the close of the month, was proceeding rapidly. Vegetation so had commenced to show improvement.

The intensely warm weather, that was so persistent during e three preceding months continued with but little respite dur- g the first three weeks of August. But a change to cooler—a ost welcome relief—set in on or about the 22d and prevailed to e 30th. In spite of this lowering of the temperature, however, e month was nearly 2° warmer than normal, the temperature ficiency during the last 10 days being insufficient to affect ma- rially the large accumulated excess of the first two decades. nerally speaking, the heat was more intense in the northern an in the southern divisions. In the northeast plain and rthwest plateau the temperature excess averaged 2.1 and 2.6° spectively; in the southwest plain and the southeast lowlands e average was 1.4° and 1.8°, respectively, while in the Ozark ateau it was but 1°.

The maximum temperature, 106°, while considerably above e normal maximum for August, did not equal the high records previous years by several degrees.

Only local showers occurred during the first two weeks, hich, as a rule, were not heavy enough even to relieve the try- g conditions; but beginning with 19th-20th, and frequently ereafter, low pressure areas apprcached near or crossed the ate causing copious rains. Although there was a marked defi- ncy in moisture during the first two or three weeks, this was rgely overcome during the last 10 days, and the month closed ith most stations showing an excess of rain.

The total precipitation for the month ranged from about 5 ches in the Black watershed to 6 in the Meramec and Gascon- le, and as much as 7 inches in the White River watershed; in e Osage, and other watersheds north of the Missouri River, the nounts were not so heavy, save in one or two localities, dimin- ning gradually from 4 to 2 inches, as the northern border is pproached.

There were no severe or damaging storms.

PRESSURE.

The mean sea-level atmospheric pressure, computed from e records of 8 regular stations, was 29.97 inches, which is 0.01 ch below normal. The highest was 30.28 inches, at St. Joseph the 26th, and the lowest was 29.66 inches, at St. Joseph on e 31st. The greatest local range was 0.62 inch, at St. Joseph.

TEMPERATURE.

The monthly mean temperature, as determined from the cords of 70 stations, was 78.0°. The mean departure from e normal for 51 stations having 10 or more years record was us 1.8°.

The highest local monthly mean, 81.1°, occurred at Steffen- lle, and the lowest, 74.0°, at Unionville. The highest tem- rature recorded during the month was 106°, at Steffenville on e 7th, and the lowest was 49°, at Unionville on the 11th.

The average number of days with temperature 90° or higher as 20 over the northeast plain; 20 in the southeast lowlands; 18 the Ozark plateau; 22 in the southwest plain; 19 over the northwest plateau; and 20 for the State. Temperatures were 100° or higher on an average of from 3 to 7 days.

HUMIDITY.

At Columbia the average relative humidity, 7 a. m., was 78 per cent; at Hannibal, 77 per cent; at Kansas City, Springfield, and St. Louis the average of the 7 a. m. and 7 p. m. readings was 64, 74 and 64 per cent respectively.

PRECIPITATION.

The average precipitation for the State, 78 stations reporting, was 4.25 inches. The departure from the normal for 63 stations having 10 or more years record was plus 0.60 inch. The monthly averages and departures for the five divisions of the State were as follows: Northeast plain, 4.49 inches, excess, 1.51 inches; southeast lowlands, 4.56 inches, excess, 0.88 inch; Ozark plateau, 4.40 inches, excess, 0.58 inch; southwest plain, 4.67 inches, excess, 0.61 inch, and northwest plateau, 3.02 inches, deficiency, 0.90 inch.

The greatest local monthly precipitation was 8.31 inches, at Mexico, and the least, 1.16 inches, at Oregon. The greatest amount recorded in any 24 consecutive hours was 3.50 inches, at Crocker.

WIND.

The prevailing winds were from the south. The highest velocity recorded was 42 miles from the south at St. Louis on the 7th. The average hourly velocities at stations equipped with anemometers were as follows: Columbia, 6.6 miles; Hannibal, 7.9 miles; St. Louis, 10.5 miles; St. Joseph, 6.9 miles; Kansas City, 10.0 miles; Springfield, 8.0 miles; Cairo, Ills., 6.5 miles, and Keokuk, Ia., 6.6 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 62, or 13 per cent below normal. At Kansas City, the percentage of the possible was 80; Springfield, 60; St. Louis, 56, and St. Joseph, 75. For the State, the average number of clear days was 15, partly cloudy, 9 and cloudy 7.

MISCELLANEOUS PHENOMENA.

Hail—7th.

Halos, Solar—21st.

Halos, Lunar—29th.

Thunderstorms—3rd, 6th, 7th, 12th, 13th, 14th, 19th, 20th, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 30th and 31st.

COMPARATIVE DATA FOR AUGUST

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Ave. No. days with .01 inch or over
1888	74.0	−1.6	110	48	7.25	+3.80	......	11
1889	73 5	−2.1	101	52	1.96	−1.49	......	14
1890	73.3	−2.3	104	49	4.84	+1.39	......	9
1891	73.2	−2.4	108	38	5.34	+1.89	......	8
1892	74.3	−1.3	100	40	2.42	−1.03	4.50	6
1893	72.8	−2.8	100	40	2.20	−1.25	5.60	4
1894	77.0	+1.4	111	39	1.58	1.87	3.07	5
1895	75.3	−0.3	104	48	4.23	+0.78	3.50	8
1896	76.6	+1.0	108	41	3.25	−0.20	4.80	6
1897	74.1	−1.5	108	41	2.39	−1.06	6.88	6
1898	75.8	+0.2	103	44	3.03	−0.42	5.00	5
1899	78.8	+3.2	107	49	3.35	−0.10	4.75	7
1900	80.3	+4.7	105	52	3.51	+0.06	4.28	6
1901	78.4	+2.8	109	47	1.88	−1.57	2.77	5
1902	75.0	−0.6	103	47	6.16	+2.71	4.33	10
1903	74.4	−1.2	102	43	5.40	+1.95	7.84	10
1904	73.7	−1.9	100	43	5.46	+2.01	6.40	8
1905	76.4	+0.8	102	48	4.69	+1.24	4.43	8
1906	76.6	+1.0	101	40	4.72	+1.27	3.94	11
1907	77.3	+1.7	109	47	3.71	+0.26	3.55	9
1908	76.4	+0.8	102	46	3.87	+0.42	6.30	8
1909	79.5	+3.9	110	40	0.55	−2.90	4.00	2
1910	74.7	−0.9	103	40	2.77	−0.68	4.21	6
1911	75.4	−0.2	109	41	4.20	+0.55	5.17	7
1912	76.2	+0.6	104	41	4.19	+0.74	2.62	9
1913	82.8	+6.9	110	41	1.06	−2.51	3.51	3
1914	78.0	+1.8	106	49	4.25	+0.60	3.50	9

Climatological data for August, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	4.53	+1.13	2.02	0	8	21[a]	1[a]	8[a]	se.	C. Randecker.
Brunswick	Chariton	652	36	76.9	+1.5	95	7†	57	29	33	3.88	−0.14	1.35	0	7	19	4	8	ne.	Louis Benecke.
Columbia	Boone	784	25	78.2	+3.5	97	8	60	15	33	7.35	+4.31	2.65	0	12	11	11	9	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	78.2	+2.2	98	7	58	28	34	5.45	+2.52	1.53	0	10	15[f]	5[f]	5[f]	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	78.8	+2.0	103	7	54	12	42	3.41	+0.11	1.44	0	9	12	1	18	sw.	L. A. Higley.
Glasgow	Howard	618	36	....	.....	....	....	....	....	....	4.00	+0.90	0.97	0	7	22	1	8	e.	J. J. Shaughnessy.
Gorin	Scotland	700	29	....	.....	....	....	....	....	....	3.31	+0.50	1.31	0	7	13	12	6	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	77.4	+2.4	97	18	56	15	35	4.99	+1.61	2.47	0	11	12	13	6	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	....	.....	....	....	....	....	....	3.69	+0.70	1.34	0	14	11	9	11	e.	C. T. Maushund.
Jefferson City	Cole	628	33	79.3	+2.6	104	7	58	11	42	7.04	+4.37	2.14	0	10	20	1	10	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	....	.....	....	....	....	....	....	4.94	......	2.09	0	6	....	....	...	......	J. T. Dewey, M. D.
Louisiana	Pike	500	37	77.6	+2.7	102	6	52	11†	43	3.31	+0.40	1.08	0	11	19	8	4	se.	J. T. Farrell.
Macon	Macon	881	2	77.6	.....	99	7	56	29	36	2.85	......	0.96	0	8	18	9	4	ne.	John A. Cook.
Mexico	Audrain	797	37	77.6	+1.5	101	18	55	11	41	8.31	+5.58	3.48	0	10	17	5	9	sw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	79.4	+2.5	102	6	60	26	37	4.04	+0.80	1.23	0	9	8	16	7	s.	E. E. Steines.
Palmyra	Marion	652	3	78.1	.....	100	18	54	12	41	3.35	......	1.38	0	7	15	11	5	sw.	W. B. Markell.
St. Catharine	Linn	914	1	77.0	.....	95	18	55	28	29	4.14	......	1.62	0	8	14	16	1	sw.	L. D. Baker.
St. Charles	St. Charles	614	37	79.2	+2.8	101	7	59	26	37	3.94	+0.99	1.21	0	9	13	11	7	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	78.9	+1.7	98	6	63	29	25	5.42	+2.76	2.03	0	10	13	13	5	s.	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	79.2	.....	99	6	63	26†	26	5.57	......	1.81	0	11	12	13	6	s.	St. Louis University.
Steffenville	Lewis	576	21	81.1	+4.5	106	7	54	11	46	3.09	−0.38	2.20	0	6	12	17	2	ne.	Frank Hall.
Sublett‡‡	Adair	1,000	....	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	......	Lewis Spriggs.
Unionville	Putnam	1,072	22	74.0	−1.7	97	18	49	11	37	3.47	−0.55	0.90	0	7	7	8	16	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	78.8	.....	101	8†	58	16	39	3.33	......	1.20	0	6	15	8	8	s.	C. B. Ellis.
Warrenton	Warren	865	24	78.4	+1.8	103	6	58	20	36	4.31	+1.57	0.95	0	10	11	8	12	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	.....	D. L. Albert.
Cardwell	Dunklin	...	4	78.8[d]	.....	96	5†	60	16†	34	5.74	......	1.16	0	14	14[a]	10[a]	6[a]	s.	E. M. Perry.
Caruthersville	Pemiscott	...	24	79.8	+0.7	98	22	62	16†	30	5.32	+2.32	1.25	0	11	15	7	9	e.	H. E. Averill.
Doniphan	Ripley	440	11	78.7	+1.3	100	6	59	16	38	5.37	+1.79	1.70	0	12	14[a]	5[a]	11[a]	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	79.1	+3.3	100	6	60	4†	35	3.81	+0.75	1.05	0	9	8	12	11	s.	L. M. Bean.
Marble Hill	Bollinger	420	21	79.4	+2.5	101	2†	53	5	48	4.98	+0.08	1.68	0	7	15	11	5	sw.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	....	.....	....	....	....	....	....	4.21	+0.74	1.30	0	10	14	1	16	se.	Miss Josie Smith.
Poplar Bluff	Butler	333	....	78.3[n]	.....	100	21	59	16	36	....	......	1.03	0	....	9[m]	1[m]	8[m]	......	M. S. Wiseheart.
Cairo, Ill	Alexander, Ill	359	44	78.0	+1.0	97	2	64	30	28	2.52	−0.41	0.98	0	10	10	10	11	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	11	....	.....	....	....	....	....	....	4.78	+1.06	1.17	0	9	16	3	12	e.	G. V. Randolph.
Belle	Maries	1,000	22	79.4[p]	+1.9	101	6	55	5	40	5.62	+2.06	1.65	0	10	4[g]	19[g]	1[g]	w.	A. J. Wofford.
Birchtree	Shannon	1,200	22	76.7	+0.6	97	6†	61	8†	34	4.39	+0.35	1.10	0	9	16[a]	7[a]	7[a]	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	75.6	−1.6	102	7	56	29	32	3.32	−0.34	1.00	0	9	17	12	2	sw.	A. C. Fink.
Cassville	Barry	1,500	4	75.8	.....	94	6†	54	29	35	4.82	......	1.27	0	11	15	10	6	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	4	79.9	.....	101	3	62	14†	33	6.49	......	3.50	0	5	22	4	5	ne.	Roy W. Reed.
Dean.‡‡	McDonald	1,000	16	75.8	−2.3	96	6	52	29	35	4.16	+0.36	1.47	0	7	19[a]	1[a]	10[a]	s.	H. E. Dean.
Duncan	Webster	...	2	76.0	.....	99	6	57	8	37	3.16	......	1.39	0	9	13	14	4	s.	C. A. Mingus.
Eldon	Miller	934	3	78.6	.....	102	7	58	11	37	3.89	......	1.45	0	11	6	24	1	s.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	76.6	.....	98	5†	58	2	37	3.18	......	1.00	0	9	15	12	4	s.	R. C. Walton.
Gano ‡‡	Dent	...	11	77.8	+0.9	101	2	58	6†	39	4.38	+0.92	1.70	0	9	18	8	5	s.	A. C. Leach.
Goodland	Iron	1,000	10	75.6[g]	+1.0	98	18†	52	5	39	3.07	+0.09	1.15	0	6	10	11	10	s.	F. M. Adams.
Hollister	Taney	1,000	5	77.8	.....	97	19	60	14†	29	7.35	......	1.70	0	9	20	0	11	sw.	W. P. Chapmann
Houston	Texas	1,280	23	76.6	+1.4	96	6†	60	13	31	6.07	+2.53	1.30	0	8	16	11	4	sw.	R. F. Harmon.
Ironton	Iron	925	37	77.8	+3.5	101	2	53	5	45	2.27	−1.16	0.65	0	10	5	14	12	s.	W. H. Delano.
Koshkonong	Oregon	911	15	80.1	+2.7	98	5	66	15	29	5.81	+2.23	1.58	0	11	14	10	7	sw.	J. W. Hitt.
Lebanon	Laclede	1,105	26	78.2	+1.8	99	7	58	4	39	3.62	+0.42	1.56	0	11	15	7	9	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	78.0	.....	98	6	55	29	29	5.33	+1.33	1.46	0	8	12	10	9	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	76.4	+1.0	95	6†	59	4	32	4.21	+0.37	0.91	0	10	11	10	10	sw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	77.8	−0.1	99	6	59	30	34	3.66	−0.44	1.35	0	9	17	9	5	sw.	J. R. White & Son.
Neosho	Newton	1,083	32	77.8	+0.9	96	20†	54	29	32	3.12	−0.96	1.05	0	7	23	2	6	se.	W. O. Buck.
Rolla	Phelps	1,139	34	78.0	+2.4	100	2	60	29	34	5.42	+1.70	1.53	0	10	15	5	11	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	27	76.4	+1.6	92	6	60	28	24	4.70	+0.39	2.00	0	10	11	15	5	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	2.76	−0.51	1.21	0	7	18	10	3	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	78.1	.....	101	7	55	29	36	7.20	......	3.03	0	13	17	9	5	sw.	Darby Fruit Farm.
Appelton City	St. Clair	853	25	77.0	−0.6	98	7	51	28	37	2.45	−1.55	1.90	0	4	14	8	9	s.	Mark Brown.
Clinton	Henry	800	28	79.5	.....	102	7	58	15	39	4.85	+1.50	2.00	0	4	17	11	3	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	78.0	+2.7	101	7	58	29	34	6.22	+2.19	2.18	0	10	11	8	12	sw.	A. J. Sharp.
Joplin	Jasper	975	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	.....	Joplin High School.
Lamar	Barton	964	34	78.9	+1.7	101	7	50	29	37	6.57	+2.44	3.30	0	8	17	4	10	s.	E. H. Adams.
Lamonte	Pettis	863	27	76.8	.....	99	7	50	11	40	4.50	+1.02	1.75	0	6	14	15	2	s.	J. Ed. Hall.
Marshall	Saline	779	24	78.4	+2.4	99	7†	53	28	39	3.44	−0.20	1.60	0	7	15[a]	10[a]	5[a]	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	....	.....	....	....	....	....	....	3.35	−0.24	0.80	0	10	11	19	1	sw.	C. Jewell.
Osceola	St. Clair	738	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	.....	W. E. Matthews.
Warrensburg	Johnson	883	35	79.3	+2.2	102	7	56	29	38	4.11	+0.59	1.20	0	10	10	19	2	ne.	Geo. H. Collins.
Warsaw	Benton	883	11	78.0	−0.2	101	22	53	29	40	3.99	−0.29	1.98	0	7	16	12	3	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	....	30	78.5	+1.4	100	7†	55	11	37	4.05	+0.09	1.90	0	5	20	10	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	25	78.4	+4.1	99	7	54	11	36	1.95	−2.22	1.40	0	8	10	16	5	e.	M. H. Moulton.
Conception	Nodaway	982	30	77.2	+3.3	98	7†	56	11†	35	2.89	−0.99	1.44	0	6	12	15	4	se.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	78.2	+3.0	104	18	55	29	39	2.78	−1.08	1.21	0	5	18	4	9	s.	W. H. Campbell.
Kansas City	Jackson	963	27	78.0	+2.2	98	7	58	28	26	3.12	−1.63	1.48	0	7	17	10	4	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	24	78.8	+3.7	100	7	58	27†	29	5.75	+1.71	2.60	0	6	21	8	2	ne.	J. F. Sharp.
Lexington	Lafayette	813	33	77.2	+1.6	96	7	52	11	34	3.71	+0.47	1.41	0	10	21	2	8	s.	J. W. Keithley.
Liberty	Clay	864	27	78.4	+2.1	100	7	55	11	37	4.12	−0.14	1.50	0	9	18	5	8	e.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	78.0	+3.1	102	18†	53	11	41	2.19	−2.27	1.25	0	5	19	2	10	e.	J. R. Brink.
Oregon	Holt	1,113	60	77.8	+2.7	99	7†	57	27	36	1.16	−3.14	0.46	0	6	18	11	2	s.	Tom Curry.
St. Joseph	Buchanan	967	43	79.0	.....	99	7	58	28	30	2.25	−1.60	1.46	0	7	15	14	2	ne.	U. S. Weather Bureau
Tarkio	Atchison	....	3	78.8	.....	102	22	52	11	37	1.81	......	0.59	0	8	13	17	1	sw.	John F. Frazier
Trenton	Grundy	812	20	77.2	+1.9	95	18	55	11	34	3.54	+0.04	1.66	0	10	17	6	8	ne.	W. H. Estes.
State means and extremes		....	....	78.0	+1.8	106	7	49	11	48	4.25	+0.60	3.50	0	9	15	9	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports ar used in determining section or division means.

Reference letters, [a], [b], ., appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. ⁺⁺Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for August, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
oonville ‖	Missouri			.04																		.86			.16	2.02	.08		.95		.16	.26	4.53
runswick ‖	Grand																				1.35				.36	.22			1.02	.72	.04	.17	3.88
olumbia***	Missouri		T.	T.		.03	.04			.59	.13			.05	.01					1.75			T.	T.	.29	2.47		.05	1.66			.28	7.35
ayette	......do					.16					.13			.25						.75				.34	.22	1.53			1.00		.01	1.06	5.45
ulton	......do						.05			.01	.04		.01								1.25				.19	.28			1.44			.14	3.41
lasgow ‖	......do						T.								.56						.76				.62	.32			.97	.34		.43	4.00
orin	Mississippi						.07	.06									.03			.70									1.03		.11	1.31	3.31
annibal***	......do			.01			.05			.05	T.			.02						.44				.43	T.	.02		.01	2.46		.05	1.45	4.99
ermann	Missouri	.02		.02				.52			.04	.10			.02						1.34			T.	.06	.20	.38		.30	.60	.01	.08	3.69
efferson City ‖	......do						.05				.11				.11						.78			2.14	.38	1.58	.63		.95	.31			7.04
eytesville	Chariton			T.											T.					.77				1.06	.18				2.09		.08	.76	4.94
ouisiana	Mississippi			.03			.02			T.	.03			.71						.41	.25				.02	.32			1.08		.11	.33	3.31
acon	Chariton						.42									.03				T.	.13			T.	.17	T.			.96	.93	.05	.16	2.85
exico ‖	Mississippi						.03	.55				T.									1.53				.03	.83	.40		.93	.49	.04	3.48	8.31
akfield	Meramec			T.						T.	.76			.29						.05	.49				1.23	.66		.11	.44		T.	.01	4.04
almyra	Mississippi			.07																	.47				.18				.98	1.38	.06	.21	3.35
t. Catherine	Grand					.93					.02									1.13			.22	.10					1.62		.07	.05	4.14
t. Charles	Missouri			T.			T.	.03			T.			.36						.37	.37				1.21	.52		.02	.68			.38	3.94
t. Louis (1)***	Mississippi			.11			T.	T.			.51			.45						2.03	T.			.07	.25	.82		.33	.21		T.	.64	5.42
t. Louis (2)	......do			.10							.66			.64						1.81	T.			.01	.27	.72		.46	.34		.01	.55	5.57
teffenville	......do			.12			.05													.43	T.			T.	.07				2.20		T.	.22	3.09
nionville ‖	Grand						.55														.90			.66	.16				.65	.50		.05	3.47
andalia	Mississippi													.56						.33	.52					.32		1.20				.40	3.33
arrenton ‖	......do							.04	.07		.15				.20						.56				T.	.68	.84		.95	.80		.02	4.31
Southeast Lowlands.																																	
ape Girardeau ‖	Mississippi																																
ardwell	......do		.20	.75						.10	1.16	.56	.06		.06					.15						.60	**	**	**	**	2.10		5.74
aruthersville	......do		T.	.35				T.	T.	T.	.85	.42	T.		.30					.07				T.		.62	.22	1.25	1.05	.14	.05		5 32
oniphan	Black			.05							.10			.20						.05	.25	.45	T.		.50	1.70	.10	1.45	.17		.35		5.37
ackson	Mississippi			.02								1.05		.22							.27				.85	.02	.35	.92			.11		3.81
arble Hill	......do										.13	.85									.13			.90			1.68	1.09	.20				4.98
ew Madrid ‖	......do				.12							.74	.02		.18									.22		.21	1.25		1.30	.15		.02	4.21
oplar Bluff	Black														.29							.04		.02		.84	.08		1.03	.03	.19	.08	
airo, Ill***	Mississippi								T.	.07	.93	.06		.14							T.				.38	.47	.01	.22	.21		T.	.03	2 52
Ozark Plateau																																	
rlington ‖	Gasconade							.70					.10			.87						.78			.18	.10		.17	.78	.10			4.78
agnell ‖	Osage																																
elle	Meramec							.39		.32				1.15						.40	.20	.20		1.65	.50			.01	.80				5.62
irchtree	Black							.24			.30				.10						.45				1.10	.90		.55	.40		.28		4.32
olivar	Osage							T.		T.	.03			T.	.33					**	1.00	.25	.01		.78			.87	.05				3.32
assville	White	.34	.79					1.27	.08	.10	.05														.58	.26		.56	.45		.34		4.82
rocker	Gasconade										.44														1.50	3.50		.50	.55				6.49
ean	Neosho							T.			.44					.17					1.47				.28			.73	.65		.42		4.16
uncan	Osage		T.					.09	.02		T.	T.								.15	.26				1.39	.26		.83	.15	.01	T.		3.16
ldon	......do						.07				.08			.72						.12	.01				.97	.41	.01	.03	1.45			.02	3.89
ruit City	Black							.20			.65	.13			.13					.04					.08	1.00		.80	.15				3.18
ano	Meramec			.57				.27			.69			.22						.08	.29					1.70		.44	.12				4.38
oodland	Black														.65					.03	.11			.23		.90		1.15					3.67
ollister	White		.30								.20	1.00									1.70			.55	.65			1.50	.15		1.30		7.35
ouston	Gasconade							.61			1.30				.52					T.	.28		.68		.95	1.02		.71					6.07
ronton ‖	Mississippi				.30				.30		.15	.10			.25						.15	T.		T.		.12	.20		.65	.05			2.27
oshkonong	Black										.09	.08								.33	.62				.14	1.34	.14	1.58	.69		.78	.02	5.81
ebanon	Osage	.25					.01	.01			.11	.01									1.56				.52	.32	.37		.40	.06			3.62
ockwood	......do							.18			.10					.28				1.06	1.46				1.15			.85	.25		T.		5.33
ountain Grove	White			.16					.78		T.	.70			.38						.65	.07				.22	.31		.91	T.		.03	4.21
ount Vernon	Neosho		T.					.14		.10	.02				.35					.53	.83							1.35	.08		.26		3.66
eosho	......do			T.							.04	T.				.18					.80				.15			1.05	.68		.22		3 12
olla	Meramec								.05		.58	.95			.70						1.53				.25	.04	.68		.57	.07			5.42
pringfield ***	White		.78				T.	.14	T.		T.			.08	.05					.55	T.				1.81	.26		.57	.35		.11		4.70
heatland	Osage																			.43					.21	1.21	.10	.70	.10	.01			2 76
Southwest Plain.																																	
moret	Osage	.01									.47			.37	.24	.12				1.65	.02	.02		.35	3.03	.07		.60	.25				7.20
ppleton City	......do													.25						.26					.04				1.90				2 45
linton	......do																							2.00	.90	.20			1.75				4.85
arrisonville ‖	......do						T.				T.				.94					.38	.35		.21		2.18	1.18	.04		.83	.08		.03	6.22
oplin	Neosho																																
amar ‖	......do	.03						T.				T.				.75					2.32		.09			.04	.02		3.30			.02	6.57
amonte	Missouri						.35								T.					.10		.10		T.	1.50	.70		T.	1.75			T.	4 50
arshall	......do					T.	.03							T.						.43	.11	T.		.10	.76			T.	1.60			.41	3.44
evada	Osage							.09			.44				.40	.10			.57	.05					.34			.80	.50				3.35
sceola ‖	......do																																
arrensburg	Missouri							.05						T.						.03	.02	1.08	.14	.30	1.20	.13		T.	1.08			.08	4.11
arsaw	Osage						.05				T.									.21	.08				1.98	.98		.08	.61				3.99
Northwest Plateau.																																	
Avalon	Grand					.25														1.70				.05					1.90			.15	4.05
ethany	......do					.04	.13				.10				T.					.10				.04					1.40		.04	.10	1.95
onception	Missouri					.11						T.			T.					.76	T.			.09					.38		.11	1.44	2.89
rant City	Grand	T.	T.			.13					.09	T.			T.					1.21				T.					1.13	T.	T.	.22	2.78
ansas City***	Missouri					.38					T.				T.					.07		.57		.51	.11			.40	1.08				3 12
idder ‖	Grand						.11														2.55								2.60	.32	.08	.09	5.75
exington ‖	Missouri	.30										.02				.04					.37				1.41	.08			1.00	.35	.08	.06	3.71
iberty	......do					.44					T.									.73	.92	.03		.11	.24			1.50			.05	.10	4.12
aryville ‖	......do					.24					.06		T.		T						.12				T.				.52	T.		1.25	2.19
regon	......do					.08					.03	T.								T.		T.		.11				.41			.07	.46	1.16
attonsburg ‖	Grand																																
St. Joseph***	Missouri					.02									T.					.06				.01				.52	.94	T.	.01	.69	2.25
Tarkio	......do					.19					.03	.05		.06						.27				.26					.59			.36	1.81
Trenton	Grand					.14							.05		.04					.65			.33					1.66	.41	.03	.05	.18	3.54

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late n the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

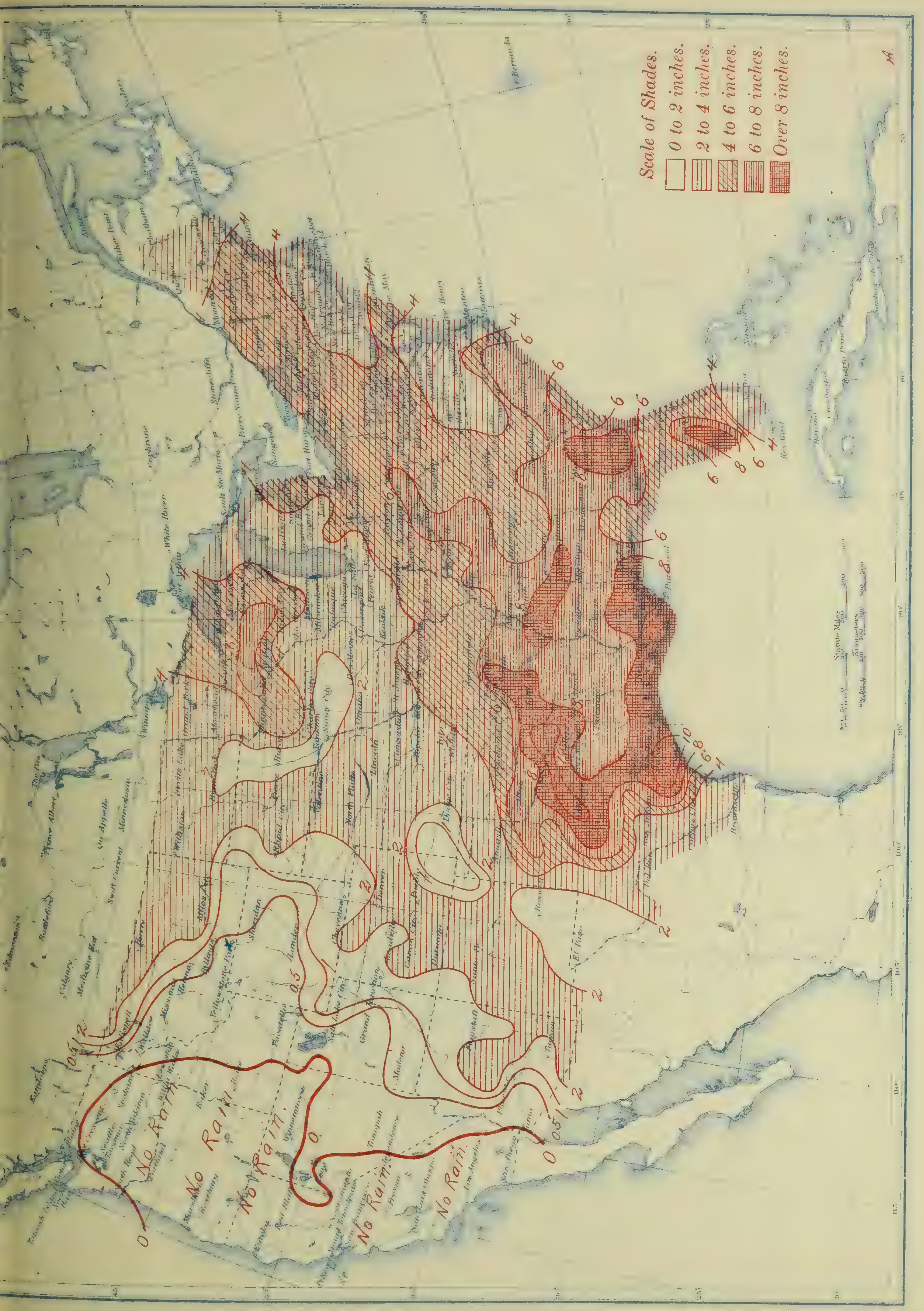
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight. **Amount included in following observation.

Daily temperatures for August, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum...	87	90	92	90	92	94	95	93	91	85	86	92	90	85	92	93	94	95	92	89	89	95	90	77	81	84	80	68	79	85	90	88.2
	Minimum ...	59	61	70	67	65	66	69	70	71	73	60	59	60	63	59	60	73	73	75	67	67	71	73	68	66	64	60	60	57	59	70	65.6
Columbia	Maximum...	80	94	93	92	97	96	97	97	88	82	85	92	93	88	93	95	95	97	88	91	91	95	96	75	79	82	81	67	79	86	91	89.2
	Minimum ...	64	71	70	67	66	72	70	68	70	67	60	64	67	65	60	70	72	74	68	67	70	74	70	67	64	62	62	61	63	66	72	67.2
Fayette	Maximum...	90	95	95	94	97	95	98	96	91	83	85	95	94	88	94	95	94	97	95	91	92	97	95	75	79	83	81	65	78	83	91	89.7
	Minimum ...	60	70	72	67	66	70	70	67	69	66	59	61	69	65	60	69	70	75	70	69	71	73	76	68	64	63	60	58	60	64	70	66.8
Hannibal	Maximum...	87	94	88	90	93	92	95	95	90	82	85	90	92	85	91	95	95	97	91	92	90	94	96	77	81	86	81	73	77	86	90	88.7
	Minimum ...	61	69	72	66	60	69	68	69	72	63	57	59	70	64	56	72	74	78	70	68	70	71	68	67	62	60	63	58	61	65	68	66.1
Jefferson City §§	Maximum...	94	99	95	97	102	103	104	100	95	88	95	102	103	97	97	100	99	102	91	96	95	98	100	77	79	86	80	68	81	88	93	93.7
	Minimum ...	63	66	71	60	65	67	66	62	66	68	58	60	64	62	59	63	68	70	71	65	66	69	69	68	65	62	63	64	60	62	71	64.9
Macon	Maximum...	90	95	94	94	94	95	99	97	92	87	89	95	96	90	93	95	96	97	91	94	95	96	95	80	86	87	84	65	81	88	91	91.0
	Minimum ...	59	66	69	63	63	66	64	65	70	72	57	59	63	60	58	60	71	72	75	65	66	69	70	67	63	61	59	58	56	59	66	64.2
Mexico §§	Maximum...	90	96	92	93	99	99	97	98	93	85	90	94	97	89	96	99	98	101	94	91	91	97	99	78	79	85	82	64	80	89	91	91.2
	Minimum ...	58	58	70	64	63	65	67	66	66	71	55	57	57	62	57	58	72	72	74	68	68	70	72	67	63	60	59	59	60	60	67	64.0
Oakfield	Maximum...	94	95	91	93	100	102	101	98	92	89	89	91	96	84	93	97	97	100	96	90	93	94	101	90	78	82	80	76	76	88	92	91.5
	Minimum ...	63	71	71	63	63	72	72	65	68	73	65	68	67	64	63	67	70	73	74	69	70	70	73	65	65	60	64	63	61	62	68	67.2
St. Catharine	Maximum...	87	91	90	92	89	89	93	92	89	85	85	91	94	86	90	92	91	95	89	88	86	90	88	76	88	81	81	77	76	83	87	87.5
	Minimum ...	60	69	68	65	67	66	64	70	70	66	57	64	71	61	67	71	73	76	69	65	69	69	74	67	63	61	70	55	56	69	72	66.6
St. Louis (1)	Maximum...	89	92	86	89	94	98	95	94	90	86	86	90	92	82	89	94	94	96	92	87	90	91	96	79	74	82	81	77	76	85	89	88.2
	Minimum ...	68	73	71	67	72	75	78	71	72	73	70	67	67	67	68	71	72	75	69	69	75	72	71	69	66	64	67	64	63	63	69	69.6
Sublett	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum ...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Unionville §§	Maximum...	90	91	92	90	85	90	94	95	90	85	86	84	94	86	92	96	95	97	95	91	88	92	88	80	84	82	80	70	80	86	85	88.2
	Minimum ...	55	60	63	60	61	60	61	63	64	62	49	52	60	53	56	60	70	72	75	60	62	64	66	60	56	58	55	54	50	52	65	59.9
Warrenton §§	Maximum...	93	95	91	93	99	103	99	100	94	85	89	95	98	86	95	98	99	100	90	94	92	97	99	79	75	83	80	65	77	89	92	91.1
	Minimum ...	61	67	71	64	64	70	68	65	68	72	61	64	68	64	61	65	69	72	74	58	70	69	72	67	64	59	62	63	61	61	66	65.8
Southeast Lowlands.																																	
Cardwell	Maximum...	95	92	92	91	96	95	93	88	88	81	80	82	90	92	89	91	94	93	91	94	96	96	95	93	91	....	....	....	....	85	94	91.0[d]
	Minimum ...	65	65	65	64	62	65	66	68	70	68	70	71	68	66	65	60	64	60	72	70	70	70	70	70	70	....	....	....	....	60	66	66.7[d]
Caruthersville	Maximum...	97	97	92	95	97	97	97	88	88	84	81	81	86	88	90	92	92	94	96	95	97	98	96	93	89	79	83	80	79	77	92	90.0
	Minimum ...	71	70	64	66	68	68	70	70	73	70	73	71	70	66	70	62	67	70	70	75	72	74	74	73	73	73	71	70	66	62	67	69.6
Doniphan	Maximum...	94	93	88	96	98	100	98	94	91	83	82	88	90	90	92	95	96	98	97	87	98	95	95	96	85	76	81	80	....	78	90	90.8[a]
	Minimum ...	68	67	69	63	60	64	68	65	68	70	70	66	70	63	61	59	62	67	69	70	67	69	69	71	67	67	74	69	....	60	65	66.6[a]
Jackson	Maximum...	93	98	92	95	99	100	94	89	89	81	90	88	91	89	95	96	98	97	95	99	99	98	96	86	80	80	81	79	78	75	90	90.6
	Minimum ...	62	67	64	60	70	72	69	70	71	71	67	71	66	61	60	66	72	72	73	68	67	72	73	71	61	69	70	66	68	61	67	67.6
Marble Hill	Maximum...	95	101	96	98	101	98	99	100	99	98	80	90	89	99	92	97	95	98	97	90	101	97	96	98	81	82	79	90	77	76	90	92.9
	Minimum ...	62	65	71	64	53	62	65	67	72	71	71	65	65	65	60	57	63	66	70	71	67	65	72	72	71	66	69	70	65	60	60	65.9
Ozark Plateau.																																	
Birchtree	Maximum...	92	93	96	....	95	97	97	87	88	85	80	83	86	90	88	92	94	95	93	86	94	94	....	94	80	78	74	75	76	74	89	87.6[b]
	Minimum ...	68	70	63	....	62	63	67	61	65	68	68	66	69	62	66	62	62	67	69	68	67	69	....	68	70	67	67	65	62	61	66	65.8[b]
Cassville	Maximum...	82	90	93	91	93	94	94	87	84	79	87	84	86	90	89	87	90	92	93	91	92	91	94	89	86	83	85	72	80	87	89	87.9
	Minimum ...	63	67	65	61	58	60	61	60	63	65	63	63	62	63	62	57	64	65	60	79	78	68	66	68	69	60	69	62	54	56	64	63.7
Duncan	Maximum...	89	92	91	92	96	99	93	90	80	85	87	86	92	92	90	93	93	94	94	88	91	91	93	88	79	81	73	71	76	80	89	88.0
	Minimum ..	62	67	65	58	59	65	64	57	64	63	66	63	64	66	58	58	64	65	68	65	65	68	68	70	70	64	67	60	60	63	68	64.0
Eldon	Maximum...	94	101	98	99	99	101	102	98	91	87	94	96	97	91	95	96	97	98	88	91	95	100	98	80	79	87	77	70	80	88	92	92.2
	Minimum ...	63	67	68	67	62	67	66	64	67	69	58	59	65	63	61	62	68	70	68	66	67	71	71	66	65	61	61	61	59	64	69	65.0
Fruit City	Maximum...	91	95	87	92	98	97	98	92	91	81	82	85	86	89	90	95	93	94	92	85	85	95	94	90	80	79	73	79	78	76	78	87.7
	Minimum ...	65	58	64	70	67	65	62	62	66	64	68	66	65	66	68	68	67	69	70	60	70	69	70	70	64	65	60	70	62	60	62	65.5
Gano	Maximum...	94	101	90	93	96	97	100	92	92	91	90	91	93	92	93	95	96	100	93	89	98	98	95	83	75	80	73	76	85	84	96	91.0
	Minimum ...	67	66	65	61	63	58	67	63	65	68	64	63	65	63	58	61	62	68	68	67	67	70	70	68	65	65	63	60	60	63	68	64.5
Hollister	Maximum...	88	88	88	90	90	94	96	88	88	84	82	86	86	88	90	92	93	95	97	80	94	96	94	82	84	80	76	74	76	84	92	87.6
	Minimum ...	64	72	68	70	68	66	70	72	74	72	70	68	70	60	64	66	68	70	68	66	68	72	74	72	70	68	66	64	60	64	66	68.1
Ironton§§	Maximum...	96	101	90	95	98	99	100	94	99	89	86	92	93	91	95	96	97	98	94	92	98	97	98	87	79	85	73	82	79	83	93	91.8
	Minimum ...	54	61	61	57	53	60	69	64	66	69	69	62	68	63	60	56	56	67	69	70	65	64	68	69	71	66	55	65	63	62	70	63.9
Lebanon	Maximum...	93	97	97	97	98	97	99	92	91	86	94	92	95	94	95	95	94	95	93	92	95	95	95	80	78	85	71	71	82	83	90	90.7
	Minimum ...	64	66	67	58	63	68	71	63	66	70	61	61	65	65	60	64	67	69	72	67	68	70	71	69	69	64	64	65	60	62	68	65.7
Mountain Grove	Maximum...	90	91	90	91	94	95	95	86	86	87	84	84	88	89	88	89	90	92	91	84	91	93	91	88	83	80	76	73	77	75	88	87.1
	Minimum ...	65	70	66	59	64	68	70	61	63	62	68	67	68	65	62	65	65	68	70	65	68	72	70	68	68	66	66	63	60	61	66	65.8
Neosho	Maximum...	87	93	92	91	92	94	94	92	88	87	90	90	90	92	91	90	91	92	94	96	96	93	92	89	84	87	84	77	80	84	90	89.7
	Minimum ...	65	68	68	64	60	66	66	64	67	69	65	64	62	64	61	63	67	70	72	66	70	69	71	70	67	60	68	64	54	66	70	65.8
Rolla	Maximum...	99	100	94	95	98	99	98	94	91	84	91	90	94	89	94	93	94	97	90	89	94	95	92	80	74	84	71	75	79	83	90	90.0
	Minimum ...	67	68	71	64	64	71	70	64	65	68	63	61	67	63	61	66	67	70	71	68	68	71	71	68	68	62	61	61	60	61	68	66.1
Springfield	Maximum...	88	91	88	90	90	92	90	83	84	79	86	86	88	90	87	88	88	88	91	87	89	91	88	83	76	81	72	69	74	79	86	85.2
	Minimum ...	66	70	69	69	68	70	71	66	66	69	68	67	68	66	63	66	68	70	67	67	71	75	72	68	69	65	69	60	61	65	68	67.6
Southwest Plain.																																	
Amoret	Maximum...	91	97	96	95	98	100	101	96	95	90	92	96	97	91	91	91	94	96	93	92	92	93	94	77	84	86	83	72	81	88	91	91.4
	Minimum ...	62	67	69	63	63	66	67	67	67	66	56	63	66	64	59	61	69	71	67	65	70	69	69	65	67	62	62	59	55	62	71	64.8
Clinton	Maximum...	95	100	99	99	97	100	102	95	95	87	94	98	96	95	96	96	97	97	95	98	98	100	100	78	84	87	82	70	89	89	92	93.5
	Minimum ...	68	68	67	60	62	62	65	65	67	60	73	60	65	60	58	65	70	70	66	68	68	70	76	66	68	62	68	60	63	60	71	95.5
Harrisonville§§	Maximum...	90	94	93	95	96	96	101	98	95	87	87	94	94	86	93	93	95	97	93	91	92	96	94	75	81	83	78	71	79	87	91	90.2
	Minimum ...	63	65	72	68	65	66	67	67	69	70	60	61	67	65	60	60	70	70	73	67	67	71	72	67	66	63	62	60	58	60	68	65.8
Lamar§§	Maximum...	91	96	95	95	97	100	101	95	94	87	94	94	95	94	92	91	96	93	95	92	93	94	94	85	82	84	73	67	79	95	92	91.1
	Minimum ...	65	65	72	69	67	67	70	69	68	71	60	66	68	68	61	61	69	71	72	68	69	72	73	70	70	62	62	65	50	58	70	66.7
Lamonte	Maximum...	89	95	95	94	95	94	99	94	92	89	87	91	93	89	92	93	89	95	97	92	94	95	90	79	82	85	81	70	84	87	91	90.1
	Minimum ...	63	68	67	60	65	64	63	62	64	61	50	51	54	56	65	69	71	67	68	67	70	72	70	64	66	60	60	60	53	66	73	63.5
Marshall	Maximum...	91	92	94	94	97	96	99	97	94	87	88	95	96	90	96	96	96	98	94	91	92	98	99	80	83	85	83	74	79	87	91	91.5
	Minimum ...	61	67	70	64	61	66	66	66	71	69	69	59	66	63	57	61	70	74	71	65	70	70	71	61	66	62	60	53	57	65	72	65.3
Warrensburg	Maximum...	90	97	93	97	99	96	102	99	96	87	88	97	95	90	97	96	98	98	97	95	98	98	94	74	82	85	80	72	82	89	94	92.1
	Minimum ...	63	63	70	65	67	68	67	69	69	70	63	62	71	64	59	68	71	73	73	65	69	70	70	67	66	64	60	59	56	66	73	66.5
Warsaw	Maximum...	95	96	95	96	100	100	100	96	92	87	90	96	95	92	96	94	98	99	93	92	96	101	100	85	79	86	80	70	78	84	91	92.0
	Minimum ...	71	66	63	60	60	70	68	66	64	62	54	58	64	61	56	62	68	72	74	64	68	74	75	58	69	64	58	61	53	61	63	64.1
Northwest Plateau.																																	
Avalon	Maximum...	91	93	95	96	94	95	100	96	94	89	92	99	100	91	97	97	96	100	95	93	90	95	94	76	85	87	85	77	80	88	91	92.0
	Minimum ...	60	68	65	65	63	66	65	69	68	66	55	62	70	59	60	71	70	74	69	68	73	70	73	60	57	64	57	56	58	64	71	65.0
Grant City	Maximum...	90	87	93	96	98	94	100	102	100	86	86	96	95	88	98	101	101	104	100	90	90	99	87	87	85	78	80	77	82	89	90	91.9
	Minimum ...	60	68	67	65	66	65	68	69	69	62	56	60	70	60	59	72	70	75	68	64	69	71	69	62	63	57	56	58	55	64	66	64.6
Kansas City	Maximum...	83	89	89	90	93	91	98	94	92	84	83	91	90	82	90	91	93	94	90	87	91	95	90	72	80	81	80	73	77	85	91	87.4
	Minimum ...	63	71	72	72	73	72	74	72	71	68	62	68	73	67	64	72	72	75	70	69	70	73	67	67	67	64	63	58	61	67	73	68.7
Kidder§§	Maximum...	88	92	94	95	95	92	100	97	93	86	88	96	94	84	93	97	95	98	94	89	88	95	83	80	85	81	82	71	78	87	89	89.6
	Minimum ...	63	72	68	66	73	67	71	71	69	67	63	70	70	66	64	73	72	75	75	67	71	71	74	67	65	60	58	59	58	67	72	67.9
Lexington§§	Maximum...	87	93	92	92	93	94	96	93	90	86	86	93	92	85	91	92	92	95	91	90	90	95	95	75	85	84	82	72	77	85	90	88.8
	Minimum ...	60	70	67	62	64	67	66	70	70	70	52	59	68	63	58	71	72	74	75	65	65	71	74	68	67	62	59	60	55	60	73	65.7
Maryville§§	Maximum...	90	93	94	95	98	95	101	100	98	87	91	97	93	90	98	99	101	102	99	95	92	102	85	88	89	84	85	75	85	92	89	93.0
	Minimum ...	59	59	65	64	65	60	65	71	71	62	53	56	62	62	57	63	68	75	76	64	65	70	70	61	61	57	57	58	55	57	64	63.0
Oregon	Maximum...	88	91	96	94	97	92	99	98	94	85	87	93	91	86	93	95	96	98	96	91	93	99	90	83	85	81	84	73	81	88	90	90.5
	Minimum ...	61	68	66	66	65	66	71	73	70	62	59	63	66	64	60	72	72	74	74	65	70	63	62	63	66	58	57	58	58	63	67	65.2
St. Joseph	Maximum...	88	94	94	93	96	94	99	96	93	85	88	95	92	81	94	94	95	97	93	92	91	97	84	85	87	82	85	74	81	87	92	90.3
	Minimum ...	61	69	68	66	69	70	72	75	73	66	61	65	70	67	64	74	74	77	70	66	72	73	67	65	68	61	60	58	61	66	67	67.6
Trenton	Maximum...	89	90	90	91	91	90	94	93	92	89	85	91	91	87	90	92	93	95	94	87	88	91	87	82	84	82	81	79	78	85	87	88.3
	Minimum ..	62	70	67	67	66	65	65	70	71	66	55	64	70	62	61	74	72	76	60	65	72	71	75	65	64	61	60	57	57	63	72	66.0

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain.
No Rain.
No Rain.
No Rain.
No Rain.
Statute Miles
Kilometres
Key West
El Paso
A.

MS
OF ... UNIVERSITY OF ILLINOIS 1914

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

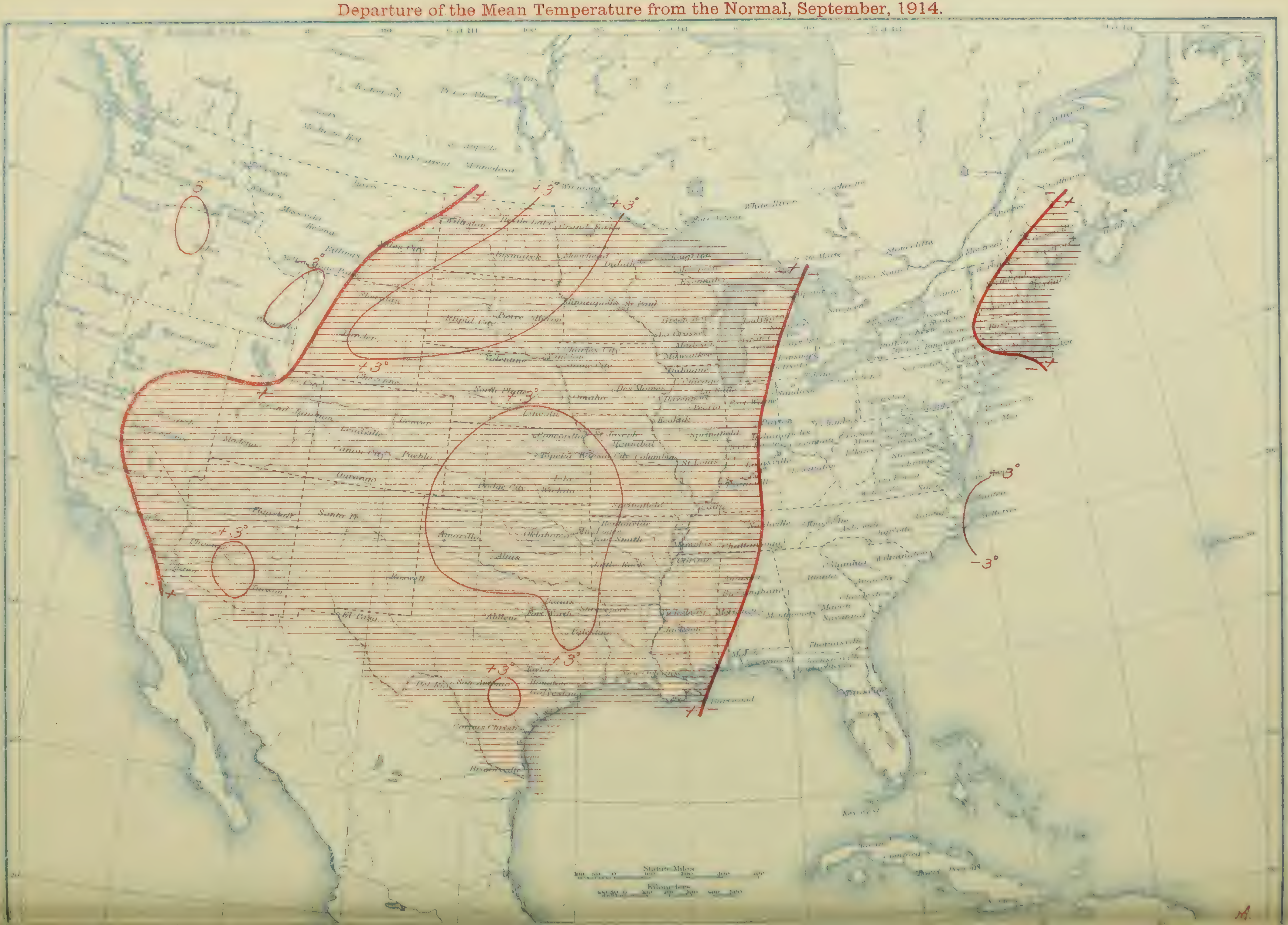
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

SEPTEMBER, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
OCTOBER 24, 1914.

Departure of the Mean Temperature from the Normal, September, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

OL. XVIII. COLUMBIA, MO., SEPTEMBER, 1914. No. 9

GENERAL SUMMARY.

September, 1914, notwithstanding unusually heavy precipation, was a favorable month for outdoor pursuits; and also it as a pleasant month from a physiological standpoint. The il was generally in good condition for plowing and sowing and pid progress was made, except in a few counties where the wer lying lands were too wet. Much the larger part of the rn crop was safe from frost at the close of the month. Pasurage was excellent, and stock was in fine condition.

The month opened with summer conditions prevailing, hich continued during most of the first 10 days, the heat uring the first week being excessive. After the 10th, though, oderate temperatures were the rule, with a pronounced cool ell from about the 18th to the 26th. Light frost occurred at e or two stations on one or two dates, but there was no mage.

The month as a whole was among the wettest of its name the past 47 years, the average precipitation exceeding the rmal in all divisions. Showers occurred almost daily during e first two decades, while from the 6th to the 15th they were cessive in most sections. Some heavy rains also occurred on e 2d and 22d. In a narrow strip along the Mississippi River om Marion County to the southern border of the State, as ell as in the extreme southwestern counties, the total rainfall as less than 5 inches, but in the remainder of the State nounts generally ranged from 6 to over 16 inches, the latter lling at one station, although several stations received amounts ceeding 11 inches. A veritable cloud-burst occurred at Bolir where 9.22 inches fell in less than 14 hours, while amounts nging from 4 to over 5 inches in 24 consecutive hours, or ss, occurred at 10 or more stations.

A few small streams overflowed bottom lands, damaging rn and other property; and a washout was the cause of one rious railroad wreck.

Owing to the relatively dry state of the soil—the result of e prolonged drought—even the excessive rains disappeared in few hours, interfering but little with farm work, except in a w localities already mentioned. There was no rain after the 2d, unusually fine weather prevailing from about that time to e close of the month.

Thunderstorms were frequent, but they were as a rule of he mild type.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 tations reporting, was 30.08 inches, or about 0.05 inch above he normal. The highest was 30.39 inches at Hannibal on the 6th, and the lowest 29.66 inches at St. Joseph on the 6th. he greatest local range was .70 inch at St. Joseph.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 67 stations, was 69.6°. The mean departure from the normal for 51 stations having 10 or more years record was plus 0.5°. The highest local monthly mean was 73.6° at Caruthersville, and the lowest was 65.5° at Unionville. The highest temperature recorded during the month was 99° at Maryville and Tarkio on the 5th, and the lowest was 35° at Cassville on the 26th. The maximum temperatures were 90° or higher on an average of 2 days in the northeast plain and northwest plateau, and 4 in the other three divisions. There was an average temperature deficiency of about 0.5° in the southeast lands, while in the northwest plateau there was an average excess of nearly 2°.

HUMIDITY.

At Columbia the average relative humidity, 7 a. m., was 89 per cent, and at Hannibal 86 per cent. At St. Louis the average of the 7 a. m. and 7 p. m. readings was 76; Springfield, 76; Kansas City, 76; St. Joseph, 77; Cairo, Ill., 80 and Keokuk, Ia., 78.

PRECIPITATION.

The average precipitation for the State, 74 stations reporting, was 6.27 inches. The departure from the normal for 63 stations having 10 or more years record was plus 2.52 inches.

The monthly averages and departures for the five divisions of the State were as follows: Northeast plain, 5.48 inches, excess 1.45 inches; southeast lowlands, 3.97 inches, excess 0.56 inch; Ozark plateau, 5.83 inches, excess 1.96 inches; southwest plain, 5.97 inches, excess 2.06 inches, and northwest plateau, 9.83 inches, excess 6.29 inches. The greatest local monthly precipitation was 16.17 inches at Kansas City, and the least was 2.20 inches at Hollister. Excessive amounts of 2.50 inches or more occurred at a number of stations, the greatest being 9.22 inches at Bolivar on the 14th-15th.

The average number of days with 0.01 inch or more of precipitation was 9.

WIND.

The prevailing winds were from the south. The highest velocity recorded was 38 miles from the southeast at Hannibal on the 14th. The average hourly velocities at stations equipped with anemometers were as follows: Columbia, 6.9 miles; Hannibal, 8.0 miles; St. Louis, 11.6 miles; St. Joseph, 7.7 miles; Kansas City, 11.4 miles; Springfield, 9.9 miles; Cairo, Ill., 7.3 miles, and Keokuk, Ia., 7.0 miles.

SUNSHINE AND CLOUDINESS.

At Columbia the percentage of possible sunshine was 62 or 6 per cent below normal. At Kansas City the percentage of the possible was 69; Springfield, 65; St. Louis, 61; St. Joseph, 60, and Keokuk, Ia., 64. For the State the average number of clear days was 15, partly cloudy, 8, and cloudy, 7.

MISCELLANEOUS PHENOMENA.

Hail—1st, 4th, 7th and 14th.

Halos, Solar—2d, 9th and 23d.

Thunderstorms—5th, 6th, 7th, 8th, 9th, 14th, 15th, 17th, 19th, 20th, 21st and 22d.

ERRATA FOR AUGUST, 1914.

Mount Vernon—Mean maximum temperature should be 88.8; and the monthly mean 77.9.

Climatological data for September, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	5.78	+1.38	1.98	0	8	13	0	17	se.	C. Randecker.
Brunswick	Chariton	652	36	68.3	+0.1	91	5	46	26	34	7.48	+3.49	2.66	0	14	13	3	14	e.	Louis Benecke.
Columbia	Boone	784	26	69.0	+1.2	94	1	44	23	31	2.56	−0.29	0.67	0	11	12	6	12	se.	U. S. Weather Bureau.
Fayette	Howard	725	32	67.9	−0.9	90	1†	45	23	31	4.24	−0.41	1.63	0	9	16	4	10	......	Prof. T. B. Smith.
Fulton	Callaway	818	24	69.4	+0.2	94	1	40	26†	44	2.80	−1.32	0.77	0	13	17	0	13	n.	L. A. Higley.
Glasgow	Howard	618	37	....	.....	....	....	....	....	....	5.82	+1.85	1.41	0	8	18	3	9	e.	J. J. Shaughnessy.
Gorin	Scotland	700	28	....	.....	....	....	....	....	....	9.13	+4.91	2.31	0	8	13	8	9	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	68.0	+0.1	91	1	44	23	32	4.48	+0.92	1.34	0	10	14	8	8	s.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	....	.....	....	....	....	....	....	4.31	+0.24	1.14	0	12	12	4	14	se.	C. T. Mauslund.
Jefferson City	Cole	628	33	70.0	+1.0	95	1	45	26	33	5.16	+2.07	1.95	0	10	18	1	11	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	....	.....	....	....	....	....	....	5.49	......	2.00	0	9	....	....	....	......	J. T. Dewey, M. D.
Louisiana	Pike	500	37	67.7	−0.1	90	1	38	26	40	4.64	+1.31	1.20	0	9	20	5	5	se.	J. T. Farrell.
Macon	Macon	881	17	67.2	−0.9	90	1†	45	23†	35	5.20	+1.24	1.41	0	10	13	9	8	se.	John A. Cook.
Mexico	Audrain	797	37	68.1	−0.6	94	1	44	26†	37	5.05	+1.09	1.74	0	15	16	1	13	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	69.4	−1.2	93	1	46	25	31	4.19	+0.20	2.19	0	7	10	13	7	s.	E. E. Steines.
Palmyra	Marion	652	3	66.8	.....	92	1	41	26	33	4.72	......	1.16	0	10	14	5	11	nw.	W. B. Markell.
St. Catharine	Linn	914	2	67.2	.....	86	5	46	23†	26	7.85	......	1.32	0	14	13	13	4	s.	L. D. Baker.
St. Charles	St. Charles	614	37	69.3	+2.9	91	1	45	25	35	3.56	+0.85	1.85	0	6	17	5	8	s.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	69.6	−0.4	89	6	52	25	22	6.68	+3.77	2.20	0	9	14	10	6	s.	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	69.4	.....	90	1	51	23†	24	8.36	......	3.44	0	9	16	7	7	e.	St. Louis University.
Steffenville	Lewis	576	21	69.8	+1.3	94	6	41	26	40	5.31	+0.86	1.45	0	8	15^{a}	10^{a}	3^{a}	ne.	Frank Hall.
Unionville	Putnam	1,072	22	65.5	−1.9	88	5	41	25	38	11.01	+6.37	2.96	0	13	11	3	16	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	68.6	.....	90	19	46	23†	33	3.38	......	1.10	0	6	16	3	11	s.	C. B. Ellis.
Warrenton	Warren	865	25	68.6	−0.1	94	1	45	25	32	3.56	−0.29	1.37	0	6	14	4	12	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	......	D. L. Albert.
Cardwell	Dunklin	...	4	71.3	.....	96	1†	42	24†	38	4.84	......	1.50	0	6	18^{b}	9^{b}	1^{b}	......	E. M. Perry.
Caruthersville	Pemiscott	...	23	73.6	+0.6	95	6	46	24	36	5.04	+1.86	1.64	0	9	20	7	3	e.	H. E. Averill.
Doniphan	Ripley	440	11	69.2	−2.3	92	6	41	27	35	4.30	+0.58	1.20	0	9	10	14	6	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	....	....	.....	....	....	....	...	....	.....	......	....	....	....	....	....	....	....	L. M. Bean.
Marble Hill	Bollinger	420	23	70.5	−0.2	95	1	41	27	40	2.41	−1.28	1.12	0	4	15	13	2	s.	Dr A. F. Hendricks.
New Madrid	New Madrid	285	21	....	.....	....	....	....	....	....	3.80	+0.47	1.42	0	12	17	3	10	se.	Miss Josie Smith.
Poplar Bluff	Butler	333	11	70.6	−1.4	95	6	44	24	38	3.66	+0.49	0.75	0	11	14	3	12	......	M. S. Wiseheart.
Sikeston	Scott	328	14	70.4^{i}	−0.3	92	21	45	27	34	....	......	0.95	0	....	....	....	....	sw.	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	44	70.7	+0.5	91	6	50	27	25	3.73	+1.26	1.07	0	8	13	8	9	ne.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	12	....	.....	....	....	....	....	....	5.12	+1.55	0.96	0	9	17	3	10	s.	G. V. Randolph.
Belle	Maries	1,000	....	....	.....	....	...	....	....	....	....	......	....	....	....	....	....	....	......	A. J. Wofford.
Birchtree	Shannon	1,200	22	69.1^{i}	−0.8	90	6	44	27	32	7.73	+4.26	3.15	0	6	20	4	6	......	V. H. Kirkendall.
Bolivar	Polk	1,020	27	71.0	+0.6	94	1	43	26	33	11.85	+8.38	9.22	0	11	18	6	6	e.	A. C. Fink.
Cassville	Barry	1,500	4	70.2	.....	91	1†	35	26	44	2.29	......	0.98	0	7	21	7	2	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	4	68.6	.....	93	1	45	25†	35	8.15	......	5.22	0	5	20	7	3	.....	Roy W. Reed.
Dean‡‡	McDonald	1,000	16	71.6^{d}	+0.3	96	8	39	26	39	3.07	0.23	1.16	0	6	18^{d}	5^{d}	3^{d}	s.	H. E. Dean.
Duncan	Webster	...	2	69.2	.....	91	1	41	26	31	10.86	......	4.15	0	11	13^{a}	12^{a}	4^{a}	s.	C. A. Mingus.
Eldon	Miller	934	16	70.0	.....	95	1	44	23†	34	8.39	+4.60	2.24	0	12	12	15	3	s.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	68.0	.....	91	1	48	26	28	4.69	......	1.65	0	6	14	13	3	s.	R. C. Walton.
Gano ‡‡	Dent	...	12	69.4	−1.1	93	1	43	23†	37	5.71	+0.88	3.75	0	6	20	8	2	s.	A. C. Leach.
Goodland	Iron	1,000	10	67.6	−0.9	92	1	38	27	39	4.76	−0.30	2.56	0	5	13	8	9	s.	F. M. Adams.
Hollister	Taney	1,000	5	70.6	.....	94	1	40	28	38	2.20	......	1.10	0	5	25	0	5	sw.	W. P. Chapmann
Houston	Texas	1,280	23	68.8	0	90	1	42	26	30	8.36	+4.37	2.00	0	8	21	7	2	s.	R. F. Harmon.
Ironton	Iron	925	37	68.4	+0.7	95	1	36	27	41	5.40	+1.91	2.45	0	11	10	10	10	n.	W. H. Delano.
Koshkonong	Oregon	911	15	72.0	+1.0	92	6	48	26†	28	5.51	+2.02	3.15	0	6	13	12	5	ne.	J. W. Hitt.
Lebanon	Laclede	1,105	27	70.3	+0.3	94	1	40	26	38	9.30	+5.47	4.30	0	7	21	2	7	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	70.8	.....	91	1†	45	26	29	3.70	+0.66	0.96	0	8	14	7	9	se.	C. S. Crow.
Mountain Grove	Wright	1,490	16	69.2	+0.3	89	1†	40	26	35	7.02	+3.04	3.20	0	5	9	12	9	sw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	70.6	−0.9	91	1	43	25†	33	5.46	+1.94	2.45	0	8	19	8	3	se.	J. R. White & Son.
Neosho	Newton	1,083	32	72.6	+2.2	92	1†	40	26	37	4.13	+0.04	1.80	0	11	18	11	2	se.	W. O. Buck.
Rolla	Phelps	1,139	34	68.7	+1.1	91	1	45	26†	35	6.18	+2.38	4.01	0	7	17	6	7	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	70.6	+2.8	89	1	47	23	22	3.59	−0.17	1.72	0	8	13	15	2	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	5.52	+1.56	3.87	0	7	11	14	5	n.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	72.0	.....	94	1	43	26	35	5.15	......	1.39	0	11	13	10	7	sw.	Darby Fruit Farm.
Appelton City	St. Clair	853	25	70.2	−0.6	91	5	44	28	35	3.07	−0.42	1.40	0	8	6	22	2	s.	Mark Brown.
Clinton	Henry	800	26	72.8	.....	93	1†	42	26	41	7.07	+3.66	2.25	0	6	14	13	3	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	69.9	+1.6	93	5	45	24†	36	5.04	+0.76	1.43	0	12	10	2	18	sw.	A. J. Sharp.
Joplin	Jasper	975	....	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	......	Joplin High School.
Lamar	Barton	964	34	73.2	+2.8	95	5†	44	26	34	4.28	+0.15	1.22	0	10	18	3	9	s.	E. H. Adams.
Lamonte	Pettis	863	26	69.9	.....	92	1†	41	25†	38	9.80	+5.55	4.05	0	11	9	13	8	sw.	J. Ed. Hall.
Marshall	Saline	779	24	69.6	+1.0	92	1†	45	23†	33	9.23	+4.82	5.21	0	8	9^{b}	11^{b}	8^{b}	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	....	.....	....	....	....	....	....	3.71	−0.54	1.40	0	9	12	14	4	se.	C. Jewell.
Osceola	St. Clair	738	....	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	......	W. E. Matthews.
Warrensburg	Johnson	883	36	71.4	+1.5	94	5	45	26	33	6.67	+3.49	2.70	0	14	14	9	7	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	71.1	−0.3	95	1†	41	26	44	5.64	+1.11	2.61	0	10	14	14	2	se.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	....	29	70.2	+1.2	92	1	45	26	31	9.53	+3.89	5.60	0	12	19	7	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	23	69.9	+3.4	95	5	44	23†	35	7.06	+3.42	2.34	0	11	14	6	10	se.	M. H. Moulton.
Conception	Nodaway	982	29	67.6	+0.8	95	5	47	25	30	10.38	+7.08	3.98	0	11	12	12	6	ne.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	67.8	+1.0	95	5	45	23	32	9.77	+5.98	4.35	0	9	17	5	8	s.	W. H. Campbell.
Kansas City	Jackson	963	27	70.4	+2.9	94	5	50	23	24	16.17	+12.41	7.03	0	12	13	9	8	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	69.2	+1.8	92	5	46	23†	26	10.41	+6.54	5.15	0	17	14	5	11	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	69.7	+1.4	92	5	44	23†	31	9.50	+5.04	2.55	0	14	12	0	18	s.	J. W. Keithley.
Liberty	Clay	864	27	71.8	+2.7	95	5†	45	23	35	12.94	+9.21	3.33	0	11	15	9	6	s.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	67.8	+1.9	99	5	44	26†	44	9.09	+5.53	3.00	0	15	19	3	8	s.	J. R. Brink.
Oregon	Holt	1,113	60	68.2	+1.2	96	5	40	23	32	8.62	+5.15	3.35	0	9	19	2	9	s.	Tom Curry.
St. Joseph	Buchanan	967	43	69.9	.....	95	5	47	23	29	6.21	+3.13	1.60	0	11	13	9	8	se.	U. S. Weather Bureau
Tarkio	Atchison	....	3	68.8	.....	99	5	45	26	32	6.23	......	1.73	0	12	14	10	6	s.	John F. Frazier
Trenton	Grundy	812	20	68.2	+0.8	90	5	46	23†	27	11.87	+8.11	6.66	0	16	17	5	8	se.	W. H. Estes.
State means and extremes				69.6	+0.5	99	5	35	26	44	6.27	+2.52	9.22	0	9	15	8	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on other dates. **Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for September, 1914.

Stations.	Watershed.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain.																																	
Boonville ‖	Missouri		.82					.12	1.98	T.	1.38	.48				.04		.38				T.	.58										5.78
Brunswick ‖	Grand	.17	.59			.11		.80	2.66	.11	.26	.72			.20	.10	T.	.07	.05			.04	1.60										7.48
Columbia**	Missouri	.36	.10			.12		.13	.54	.21	.49	T.	T.		.20	T.		.15		T.		.01	.25										2.56
Fayette	do	.95				.02	T.	1.04	.59	.54	.45		.02		T.	T.		.30		T.			.33										4.24
Fulton	do	.11	.77			.60	.02	.02	.48	.14	.30	.01				.15		.02				.04	.14										2.80
Glasgow ‖	do		.76					.34	1.41	.46	.73	.52		T.				.62					.98										5.82
Gerin	Mississippi	2.31				.30		.67			2.02			.03	1.79			1.57					.44										9.13
Hannibal***	do	1.30	.04			.82		.60	.23	.02	.40	T.			.63			.05				T.	.39										4.48
Hermann ‖	Missouri		.48	.01		.66	1.04	.14	.58		.01	.18	.01			1.14							.05	.01									4.31
Jefferson City ‖	do		.35					.02	1.95	.05	.48	.45				1.20		.03					.43	.20									5.16
Keytesville	Chariton	.53				.03			2.00	1.03	.73		.04		.07			.30				.76											5.49
Louisiana	Mississippi	.60	1.20			.89		1.03	.53		.26	.01										.05	.07										4.64
Macon	Chariton	.35	.39			.71		.16	1.05		.04	.61						1.41	.04				.44										5.20
Mexico ‖	Mississippi	T.	.90			1.74	.01	.07	.86	.04	.13	.18	.01	.02		.63		.11	.03				.31	.01									5.05
Oakfield	Meramec		.44			1.14	.01	T.	.33	T.	.06		.02			2.19					T.												4.19
Palmyra	Mississippi	.72	1.16			.62			.93		.02	.27				.63		.10					.23	.64									4.72
St. Catherine	Grand	.88	.16			1.32	.10	1.10	.65	.09	1.01	T.	T.	.11	.07	.32		.98				.16	.90	T.									7.85
St. Charles	Missouri		.56			.81	.01	T.	.32			.01				1.85																	3.56
St. Louis (1)***	Mississippi	2.02	.18			1.89	.14	.04	.26		.06				T.	2.05						T.	.04										6.68
St. Louis (2)	do	2.53	.20			1.57	.21	.04	.29		.06			T.		3.44						T.	.02										8.36
Steffenville	do	.86	.23			.75	.40	1.00	T.	1.45			T.			.02		.60															5.31
Unionville ‖	Grand	2.70	.26			.70	.05		1.20		1.85	.26		.04	.20	.30		1.75				.20	1.50										11.01
Vandalia	Mississippi	.10	1.10			.50			.80			.50											.38										3.38
Warrenton ‖	do		.65			1.12	.04		.36		T.	.02	T.	T.		1.37																	3.56
Southeast Lowlands.																																	
Cape Girardeau**‖	Mississippi																																
Cardwell	do		.33				.87			.41		1.50				.75		T.						.98							T.		4.81
Caruthersville	do		.22			.02		1.10	T.	.36		.53		.23		.55				T.			.39	1.64									5.04
Doniphan	Black		.25			.08		1.00	.05	.70		.50		T.		1.20				T.	.25		.27										4.30
Jackson	Mississippi																																
Marble Hill	do					1.12		.87	.20			.22																					2.41
New Madrid	do		.06	.10			.15	1.42	.02	.01	.10	.26				.04	.16				T.		1.20		.28								3.80
Poplar Bluff	Black		.33	.06			.75	.07		.56	.13	.59	.20			.48	.12						T.	.37									3.66
Sikeston	Mississippi											.19			T.	.95						.08	.50	.70									
Cairo, Ill.**	do		.21			.03	1.07		.42		.07			T.		.62					T.	T.	.33	.38									3.73
Ozark Plateau.																																	
Arlington	Gasconade		.40			.16		.20	.78	.28		.96				2.20					T.		.06	.08									5.12
Belle	Meramec																																
Birchtree	Black		1.20				1.85	1.17	.13							3.15							.23										7.73
Bolivar	Osage		.30		.07		.20		.38		.95		.05			9.22		.01			.25	.04	.38										11.85
Cassville	White		.55		.36							.30	.05		T.			T.			.02	.03	.98										2.29
Crocker	Gasconade		.49			.54			1.10	.80						5.22																	8.15
Dean	Neosho		.78									.06			.05						.02	1.00	1.16										3.07
Duncan	Osage		.98		.05		.03		.05	.05	3.00	2.10	.13			4.15				.06			.26										10.86
Eldon	do		.70		.25		T.	.21	1.31	.09	2.24		.02		T.	2.13		.15		.80		.04	.45										8.39
Fruit City	Black		1.00				.72			.32	.70					1.65							.30										4.69
Gano	Meramec		.73						.24	.04	.31	.64				3.75																	5.71
Goodland	Black		.68			.47									2.56						.05		1.00										4.76
Hollister	White		.35										1.10	.10	.20						.45												2.20
Houston	Gasconade		1.00	.25			T.	.31	.65	T.	1.00	2.00	T.			3.00					.15												8.36
Ironton	Mississippi		.56	T			.95	.12	.10	.25		.40			.10	2.15	.30				T.	.20		.27									5.40
Koshkonong	Black		.94					.47				3.15	.08	T.		.80				.07		T.	T.										5.51
Lebanon	Osage		.88	.02						.70	.15	3.00		.25		4.30																	9.30
Lockwood	do		.36				.15			.20		.76			T.	.61		.41				.25	.96										3.76
Mountain Grove	White		.85							.15		3.20	T.			2.70	.12				T.			T.									7.02
Mount Vernon	Neosho		.90		.15		T.					1.02	.07			2.45					.11	.15	.61										5.46
Neosho	do		1.23				T.	.02					.25		.01	.20		.07		.01	.06	.47	1.80	.01									4.13
Rolla	Meramec		.37					.02	.50	.07		1.17				4.01	.04																6.18
Springfield***	White		.34				T.		.07		1.00	.06	.08		T.	1.72				.04		T.	.28										3.59
Wheatland	Osage									.70	.60		.10			3.87			.10	.05	.10												5.52
Southwest Plain.																																	
Amoret	Osage		.96				.34	.03	.55	.16	.34	T.	.04		.62	.70			.02	T.		T.	1.39										5.15
Appleton City	do		1.40				.20		.15	.48	.41	.06			.02							.35											3.07
Clinton	do	1.25					2.00				.90					2.25						.17	.50										7.07
Harrisonville ‖	do		1.43				.20	.08	.25	.02		1.16		T.		.54	.02		.02		.05		.73	.54									5.04
Joplin	Neosho																																
Lamar ‖	do		.27					.15	T.	.08		.82		.06		1.22			.28			.29	.74	.37									4.28
Lamonte	Missouri		1.00		1.45			.35	4.05	.35	.85	T.	.10	T.		.15		T.		.05	.10	T.	1.35	T.									9.80
Marshall	do		1.14		.05		T.	.82	5.21	.35	.35		T.		.08					T.		T.	1.23										9.23
Nevada	Osage		.25				.22		.28		.54		.08		.03	1.40		.02	T.	T.	T.		.89										3.71
Osceola ‖	do																																
Warrensburg	Missouri		.55	.02			.04	.58	.54	.25	1.25	T.	.03		.01	.33		.19	.05		.13	T.	2.70										6.67
Warsaw	Osage		1.09		T.		.09	T.	.57	.18	.78	T.	.03		T.	2.61		.05				.07	.17										5.64
Northwest Plateau.																																	
Avalon	Grand	.33			.55			3.05	2.55	.30	.55			.15	.30	.04		.62				.11	.98										9.53
Bethany	do	.23	.10				.02	1.30	2.34	.33	.68			.10	.98			.15			T.		.83										7.06
Conception	Missouri	.09					.05	1.30	.10	2.03	.50	T.	T.	.15	3.98	.08		T.			T.	1.10	1.00										10.38
Grant City	Grand	T.	T.				.04	.43	.75	.60	1.20	T.	T.	.20	4.35	T.		.35			T.	T.	1.85										9.77
Kansas City***	Missouri	.55			T.		.91	6.12		.01	2.20	T.	.02	.02	.59	3.61		T.		T.	.01	1.68	.45										16.17
Kidder ‖	Grand	.05	.30			.04	.03	.35	5.15	.08	.70	.15		.05	.70	.92	.04	.95	.04			.12	.77										10.44
Lexington ‖	Missouri		1.84			.02		.50	2.55	.03	.46	1.15		.05	T.	.04	.32		.65		.05	.20	1.64										9.50
Liberty	do		.33		.47			3.33	.07	2.96	2.25		.32		.57	.70		T.			.30		1.70										12.94
Maryville ‖	do	.03	.04				.14	.06	.50	.32	.73	.03		.30	3.00	1.90	.02		.17			.07	1.78										9.09
Oregon	do					.28		2.21		.42	.72		.09	.21	3.35		.04	T.					1.30										8.62
Pattonsburg ‖	Grand																																
St. Joseph***	Missouri	.18				.08		1.57		1.60	1.01	T.	.07	.18	.59	.02	T.	T.			.09	.82	T.										6.21
Tarkio	do						.03	1.13	.09	.05	.70		.12	1.73	.65	.01		.01				.52	.19										6.23
Trenton	Grand	.04			.66	.64	.22	6.66	.07	1.10	.20			.28	.41	.02	.19	.03			.38	.94	.03										11.87

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

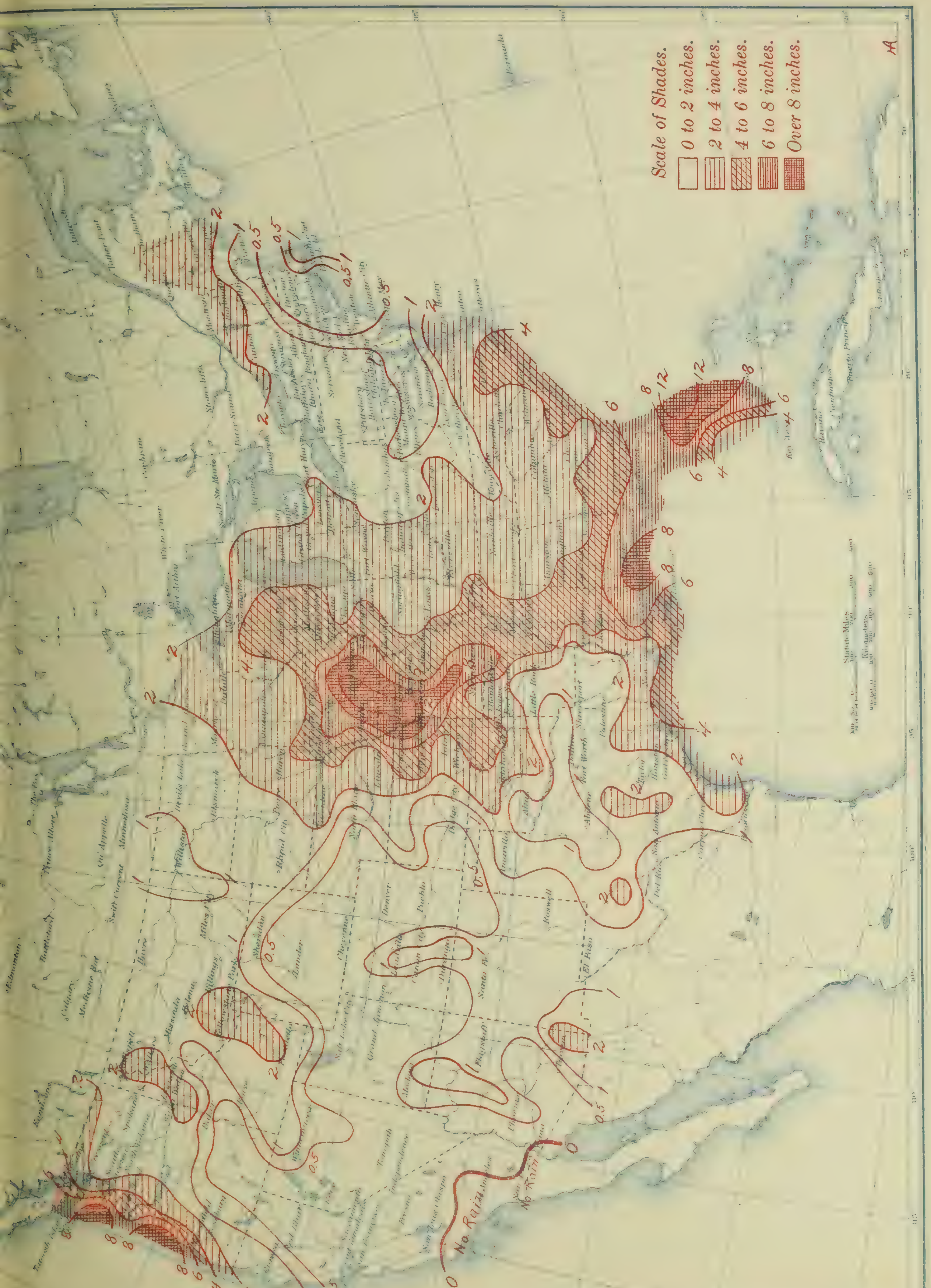
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight. **Amount included in following observation.

Daily temperatures for September, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Northeast Plain.																																	
Brunswick §§	Maximum	90	75	82	81	91	81	72	72	78	79	66	72	84	80	82	87	80	85	86	83	83	63	73	75	70	74	77	78	80	81		78.7
	Minimum	71	58	55	55	57	69	68	60	59	56	63	54	54	64	64	62	68	60	60	69	69	58	48	48	47	46	46	49	50	50	....	57.9
Columbia	Maximum	94	74	82	83	90	86	78	72	69	73	68	73	85	85	75	87	83	82	84	84	82	74	70	73	67	73	77	78	78	80		78.6
	Minimum	68	56	53	59	68	72	69	61	60	63	58	54	62	71	69	67	66	62	66	68	70	50	44	50	47	46	52	51	49	49		59.3
Fayette	Maximum	90	73	82	81	90	85	72	71	67	74	68	71	65	81	77	87	81	80	84	82	81	72	70	72	67	73	78	79	80	80	.	77.1
	Minimum	68	59	53	56	68	76	66	59	57	62	54	52	62	70	68	66	66	60	64	66	70	48	45	52	48	46	50	50	49	50	.	58.7
Hannibal	Maximum	91	75	82	79	85	87	71	66	67	64	64	72	81	87	77	85	84	83	86	84	85	74	69	71	67	72	76	79	80	81	.	77.5
	Minimum	68	59	54	55	66	71	63	58	54	58	56	54	62	70	69	67	62	62	67	68	71	51	44	50	49	46	52	49	48	50	...	58.4
Jefferson City §§	Maximum	95	76	88	87	88	93	85	76	72	75	66	75	86	88	76	88	85	84	86	84	85	65	70	75	69	76	80	80	80	81	....	80.5
	Minimum	74	59	59	58	61	72	69	65	60	61	63	51	55	64	67	66	68	61	64	65	69	64	48	49	50	45	47	48	49	48	...	59.4
Macon	Maximum	90	76	82	83	90	87	69	71	68	70	67	74	85	83	79	88	83	84	88	86	83	61	72	72	68	74	78	80	81	83	...	78.5
	Minimum	66	57	55	52	55	66	65	56	55	54	58	50	52	61	63	64	66	58	60	65	68	58	45	46	45	45	47	48	48	52	...	56.6
Mexico §§	Maximum	94	76	85	84	87	88	72	69	67	72	61	74	87	89	77	90	85	83	88	87	87	66	72	74	69	75	81	81	83	81	..	79.5
	Minimum	66	59	54	54	54	66	69	59	59	58	59	51	52	63	67	64	67	59	59	64	67	63	45	45	45	44	44	50	48	47	...	56.7
Oakfield	Maximum	93	84	84	84	83	91	81	70	72	69	68	74	82	83	78	84	83	83	86	86	87	79	70	76	70	73	78	78	80	79	....	79.6
	Minimum	73	59	53	58	64	73	68	61	58	57	60	53	60	71	65	63	64	61	67	64	68	60	47	50	46	50	48	52	52	53	...	59.3
St. Catharine	Maximum	85	75	80	79	86	81	79	67	66	73	70	70	81	79	78	84	82	80	83	82	80	76	68	69	65	69	72	74	75	77	....	76.3
	Minimum	65	56	55	53	62	68	64	56	54	60	57	52	61	73	59	70	66	60	64	67	69	53	46	57	46	46	51	52	50	52	...	58.1
St. Louis (1)	Maximum	89	75	82	79	83	89	78	70	70	69	67	70	79	81	74	84	81	82	85	85	87	78	69	74	69	71	75	77	79	79	...	77.7
	Minimum	69	62	60	62	63	73	69	60	59	58	60	55	58	70	65	64	67	64	71	70	70	57	52	54	52	53	55	58	59	59	....	61.6
Sublett	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Unionville §§	Maximum	84	75	80	82	88	86	70	66	64	70	71	74	76	80	82	86	84	85	87	84	80	66	74	70	72	74	75	78	80	83	..	77.5
	Minimum	62	54	52	46	50	64	66	54	52	50	56	46	52	60	52	56	64	53	60	61	62	54	44	48	41	42	46	50	52	56	....	53.5
Warrenton §§	Maximum	94	75	85	84	84	89	74	67	68	73	63	74	83	88	84	87	82	85	86	85	87	69	69	73	68	71	78	80	80	81	...	79.0
	Minimum	70	60	56	56	60	65	68	59	57	58	60	52	64	64	65	63	65	60	61	66	67	64	46	47	45	46	46	50	52	53	....	58.2
Southeast Lowlands.																																	
Cardwell	Maximum	96	90	87	90	92	94	96	90	88	86	85	74	80	88	80	86	85	86	87	89	90	86	73	80	74	80	90	80	70	83	....	85.2
	Minimum	66	67	67	55	56	57	58	54	52	54	58	63	64	65	65	60	55	55	60	60	65	60	55	42	50	42	60	48	52	58	...	57.4
Caruthersville	Maximum	94	88	86	91	88	95	90	86	80	86	79	80	86	85	77	88	88	87	85	92	83	86	75	79	78	77	84	85	81	76	...	84.8
	Minimum	73	69	65	58	62	68	70	68	65	59	69	63	65	69	65	63	58	69	69	68	68	68	56	46	56	53	48	53	55	56	....	62.5
Doniphan	Maximum	91	85	84	87	84	92	88	81	76	82	78	73	83	82	78	82	82	82	82	82	86	82	63	78	66	70	74	75	78	75	..	79.6
	Minimum	67	65	59	56	63	67	67	70	59	57	66	61	63	71	64	62	57	62	66	66	62	62	54	43	46	44	41	44	46	50	....	58.9
Jackson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marble Hill	Maximum	95	84	87	88	80	90	90	84	79	77	78	77	83	79	76	85	85	86	86	87	89	84	66	85	75	75	77	80	81	80	....	82.3
	Minimum	70	66	59	55	60	60	67	69	61	56	66	54	62	68	65	60	67	66	63	65	64	65	55	45	49	43	41	43	47	49	...	58.7
Ozark Plateau.																																	
Birchtree	Maximum	89	84	....	....	....	90	86	80	75	....	....	80	80	82	75	84	86	81	80	80	....	76	69	75	72	71	[illegible]	76	79	75	...	79.1f
	Minimum	69	68	....	....	....	63	66	68	61	....	....	60	62	72	63	61	72	57	64	66	....	64	52	48	45	46	44	48	47	52	...	59.1f
Cassville	Maximum	91	79	87	88	89	89	89	91	88	83	85	74	87	88	82	90	88	90	82	84	84	75	70	80	74	78	80	78	80	82	....	83.5
	Minimum	71	62	55	62	62	68	65	63	64	65	62	63	64	74	72	69	70	61	53	64	64	54	42	39	38	35	36	39	33	40	....	57.0
Duncan	Maximum	91	84	82	86	89	85	88	89	75	83	77	67	80	82	83	83	83	....	80	82	81	75	66	75	69	72	73	75	75	76	....	79.5a
	Minimum	71	64	54	57	69	70	65	65	67	63	63	59	67	72	64	65	63	....	59	68	67	55	46	45	43	41	43	45	46	48	..	58.8a
Eldon	Maximum	95	78	87	88	92	90	88	81	73	74	70	68	85	87	78	88	87	85	87	85	84	76	72	77	71	74	78	79	80	81	....	81.3
	Minimum	73	59	53	56	65	73	67	63	60	64	60	53	60	73	66	65	67	58	63	64	67	54	44	50	45	44	48	46	51	49	....	58.7
Fruit City	Maximum	91	78	82	85	78	89	90	86	80	76	75	70	80	81	75	83	81	80	81	80	83	76	66	76	70	70	71	75	78	80	....	78.9
	Minimum	64	55	58	60	55	64	64	62	61	55	51	56	55	65	55	66	59	55	57	58	62	56	54	57	51	48	50	54	53	52	....	57.1
Gano	Maximum	93	85	85	89	84	81	91	80	76	77	72	74	81	88	80	84	83	83	85	85	87	78	68	80	70	76	81	80	82	81	....	81.3
	Minimum	71	61	53	55	66	71	66	65	59	58	60	55	60	68	65	64	58	59	58	66	56	53	43	47	47	43	50	49	45	51	....	57.4
Hollister	Maximum	94	80	88	88	92	90	92	92	84	86	84	66	86	88	82	88	86	84	84	86	86	72	70	80	76	74	78	78	76	78	...	82.9
	Minimum	68	66	62	64	64	68	70	66	64	62	60	60	58	60	62	66	64	54	58	60	66	64	56	48	44	42	41	40	42	44	....	58.2
Ironton §§	Maximum	95	78	86	90	81	90	90	80	76	75	71	75	82	80	74	84	85	84	85	85	85	78	68	77	71	73	77	78	80	80	....	80.4
	Minimum	73	66	50	54	62	68	65	65	60	56	65	50	58	72	65	61	57	58	60	62	62	70	52	42	41	38	36	38	39	43	....	56.3
Lebanon	Maximum	94	80	87	90	92	85	90	85	77	80	78	71	85	87	90	87	87	86	84	84	84	69	65	80	75	75	80	80	81	81	....	82.3
	Minimum	70	64	52	55	61	72	68	67	62	63	65	60	60	70	65	65	65	57	58	66	68	65	43	42	42	40	43	48	47	47	....	58.3
Mountain Grove	Maximum	89	75	82	88	86	88	86	85	75	....	78	68	80	89	79	84	83	81	82	83	86	74	67	75	71	74	77	79	81	78	....	80.1a
	Minimum	70	63	58	59	63	70	68	70	65	62	....	61	61	65	68	58	62	58	62	60	66	66	49	44	42	40	42	46	46	47	....	58.3a
Neosho	Maximum	92	88	88	92	92	90	89	91	90	89	85	81	89	85	88	92	90	84	85	86	84	80	70	79	75	77	81	81	81	81	....	85.2
	Minimum	74	62	55	65	70	74	65	67	66	67	67	67	65	73	68	69	75	56	60	64	65	56	42	43	41	40	44	45	46	45	....	59.9
Rolla	Maximum	91	75	85	89	85	89	89	80	74	76	69	73	82	85	76	85	86	84	85	83	84	74	68	74	76	74	77	78	80	70	....	79.9
	Minimum	70	64	53	54	60	68	65	66	60	59	60	54	56	62	63	64	63	61	62	65	68	63	46	46	48	45	48	46	45	42	....	57.5
Springfield	Maximum	89	73	81	85	88	84	86	86	78	85	80	63	85	84	79	85	84	80	78	80	82	71	66	74	69	70	74	74	76	76	....	78.8
	Minimum	71	62	59	66	69	71	70	71	69	66	65	62	65	72	66	68	67	62	66	69	69	52	47	53	50	48	52	55	56	57	....	62.5
Southwest Plain																																	
Amoret	Maximum	94	90	85	93	91	91	91	87	80	85	85	70	87	84	86	89	90	85	85	85	88	82	75	77	74	76	78	80	82	80	....	84.2
	Minimum	75	58	54	70	59	69	69	69	65	68	64	59	63	68	64	64	68	61	63	67	68	52	44	50	46	43	48	47	47	50	....	59.7
Clinton	Maximum	93	85	87	90	93	88	93	85	80	77	79	68	88	87	88	90	90	89	90	90	90	76	79	77	75	78	80	85	87	88	....	84.8
	Minimum	75	62	65	58	69	70	75	68	64	67	69	50	62	75	68	70	68	60	68	67	67	54	54	50	44	42	45	45	46	50	....	60.9
Harrisonville §§	Maximum	92	75	85	89	93	85	86	81	75	79	69	69	88	81	83	80	88	83	85	84	86	64	75	74	72	75	79	81	81	81	....	80.6
	Minimum	72	59	53	53	60	68	69	68	64	64	66	59	59	68	63	68	70	62	62	66	68	56	46	45	47	45	45	51	50	50	....	59.2
Lamar §§	Maximum	92	78	88	92	95	93	88	93	91	88	82	72	90	81	84	88	90	85	93	95	85	65	73	80	75	78	80	83	82	82	....	84.7
	Minimum	65	64	54	58	68	73	73	70	69	69	67	64	65	72	67	70	69	62	64	70	65	64	45	47	47	44	50	52	52	49	....	61.6
Lamonte	Maximum	92	89	90	82	84	86	92	77	78	74	72	69	83	83	86	89	85	85	83	84	84	74	76	74	76	75	78	80	82	81	....	81.4
	Minimum	67	58	52	58	61	67	67	63	60	65	60	55	64	63	69	70	68	59	68	67	67	53	43	42	41	41	50	48	56	51	....	58.4
Marshall	Maximum	92	83	83	83	91	92	78	74	69	77	74	70	80	83	....	88	83	84	87	83	84	79	73	75	74	76	79	....	81	80	....	80.5b
	Minimum	71	57	50	56	61	73	69	60	59	63	60	52	61	74	....	67	67	60	65	66	65	53	45	49	45	45	49	....	48	51	....	58.7b
Warrensburg	Maximum	93	84	87	89	94	88	86	78	78	75	73	69	90	83	87	88	86	84	86	85	86	75	75	74	71	78	82	83	83	83	....	82.4
	Minimum	75	58	56	57	70	69	68	66	61	61	61	58	62	73	65	69	68	60	64	65	68	59	46	52	49	45	51	51	50	52	....	60.3
Warsaw	Maximum	95	91	88	91	95	90	91	83	73	75	72	67	89	86	84	90	88	84	83	86	88	82	64	78	76	75	80	80	75	82	....	82.7
	Minimum	66	64	52	57	51	73	73	68	64	67	64	60	64	76	69	72	72	58	64	70	69	56	46	47	46	41	44	44	44	45	....	59.5
Northwest Plateau.																																	
Avalon	Maximum	92	85	86	84	91	89	84	68	69	81	78	73	84	85	85	88	83	84	87	84	82	78	76	74	70	75	78	80	83	84	....	81.3
	Minimum	69	56	55	53	66	73	64	57	55	62	59	52	62	70	59	76	66	58	63	66	67	61	58	53	46	45	50	49	52	54	....	59.2
Grant City	Maximum	85	77	85	80	95	86	80	68	68	81	77	70	79	75	80	86	83	83	83	81	84	77	75	70	66	73	78	79	81	82	....	78.9
	Minimum	67	51	53	52	68	66	60	55	53	61	59	53	61	61	52	68	64	59	62	61	67	50	45	53	47	46	48	50	52	53	....	56.6
Kansas City	Maximum	91	75	84	83	94	91	78	71	75	83	73	65	86	79	82	87	86	81	84	81	85	66	72	73	69	72	77	77	79	77	....	79.2
	Minimum	68	59	60	60	71	75	65	64	61	68	57	56	65	62	60	71	68	64	67	68	64	54	50	54	53	51	55	55	59	61	....	61.6
Kidder §§	Maximum	88	73	71	78	92	88	72	68	67	80	66	68	82	87	82	85	83	81	85	81	82	63	72	70	68	72	77	78	80	82	....	77.4
	Minimum	76	55	56	51	72	72	66	62	58	66	62	56	65	72	62	71	66	61	63	68	69	55	46	53	46	48	61	53	55	58	....	60.9
Lexington §§	Maximum	90	75	81	83	92	89	75	73	72	78	70	68	85	81	85	87	86	83	85	83	83	62	73	75	70	73	77	78	81	81	....	79.2
	Minimum	76	58	55	56	71	73	66	66	60	65	65	55	63	74	62	70	69	60	64	67	69	56	44	52	46	44	51	49	50	50	....	60.2
Maryville §§	Maximum	85	80	89	83	99	89	89	65	70	84	75	90	81	68	82	88	87	85	85	81	83	68	77	72	71	75	78	79	80	81	....	80.6
	Minimum	66	50	50	54	55	66	62	59	56	56	61	53	55	65	50	55	69	62	60	60	65	49	45	45	46	44	44	50	50	52	....	55.1
Oregon	Maximum	86	77	84	84	96	88	77	69	70	83	77	64	81	74	83	85	81	81	83	80	83	79	72	71	68	70	75	74	78	74	....	78.2
	Minimum	73	52	51	57	71	68	63	58	57	65	62	53	62	58	53	72	70	63	62	62	65	48	40	48	48	47	53	51	53	55	....	58.1
St. Joseph	Maximum	88	78	86	84	95	88	76	69	73	84	71	65	86	78	85	89	89	85	85	82	85	66	76	73	72	74	78	79	81	81	....	80.1
	Minimum	65	55	59	59	71	71	66	60	59	67	58	55	64	57	56	72	68	64	65	69	61	51	47	54	48	48	55	55	54	54	....	59.7
Trenton	Maximum	88	80	80	80	90	87	82	73	70	71	77	72	79	80	80	80	80	81	82	81	81	79	69	67	65	68	74	73	77	74	....	77.3
	Minimum	67	56	56	55	63	69	63	56	55	62	60	51	71	71	56	68	67	68	64	67	68	52	46	55	47	46	51	52	52	54	....	59.1

etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
A
No Rain
No Rain

COMPARATIVE DATA FOR SEPTEMBER

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Ave. No. days with .01 or over
1888	65.2	−3.7	97	28	1.11	2.56	......	4
1889	64.7	−4.2	94	31	4.66	+0.99	......	11
1890	63.7	5.2	98	31	3.98	+0.31	......	9
1891	70.6	+1.7	104	30	0.63	3.04	......	6
1892	67.8	−1.1	97	32	2.39	−1.26	3.00	4
1893	69.9	+1.0	107	26	3.92	+0.25	5.20	6
1894	68.5	−0.4	101	34	4.93	+1.26	3.07	5
1895	71.8	+2.9	104	25	2.45	−1.22	6.21	4
1896	65.0	−3.9	101	28	4.17	+0.50	4.10	10
1897	74.3	+5.4	105	27	0.74	−2.93	2.13	2
1898	70.9	+2.0	103	30	6.74	+3.07	6.10	9
1899	67.4	1.5	108	16	2.04	−1.63	3.01	4
1900	71.1	+2.2	100	29	4.81	+1.11	3.79	10
1901	68.9	0.0	103	27	2.31	−1.36	2.80	6
1902	63.2	−5.7	95	30	4.78	+1.11	6.55	10
1903	66.4	−2.5	98	32	4.41	+0.74	6.77	8
1904	69.6	+0.7	96	34	3.85	+0.18	2.16	3
1905	69.6	+0.7	98	41	7.67	+4.00	7.90	10
1906	71.9	+3.0	98	36	4.15	+0.48	4.28	11
1907	68.9	0.0	101	31	1.93	−1.74	2.25	6
1908	71.6	+2.7	99	28	1.80	−1.87	2.68	4
1909	68.7	−0.2	105	28	4.62	+0.95	4.48	8
1910	69.5	+0.6	97	34	5.58	+1.91	4.63	10
1911	73.7	+4.6	105	39	7.13	+3.46	7.75	11
1912	68.6	−0.3	105	27	3.06	−0.61	3.61	6
1913	69.4	+0.5	109	27	4.63	+0.79	4.08	9
1914	69.6	+0.5	99	35	6.27	+2.52	9.22	9

DROUTH AT ST. JOSEPH, MO., DURING JULY AND AUGUST, 1914, WITH COMPARISONS.

BY W. S. BELDEN, LOCAL FORECASTER

A period of remarkably dry weather prevailed in St. Joseph and vicinity from July 6 to August 27, 1914,—52 days—during which time the total rainfall was only .27 inch, or less than that recorded in any other period of equal length since the establishment of the office of the Weather Bureau in this city.

Notwithstanding this marked deficiency in moisture at a critical time in the growth of corn, the copious showers in June and on July 6, together with the absence of hot winds and excessively high temperatures in August, tended to a considerable extent to ameliorate the ill effects of the drouth.

The yield of corn will be much better than last year, especially on low lands, where in some instances it promises to be nearly normal. However, pastures were burned out, the hay crops were cut short, plowing for fall seeding was much delayed, and the excessive amount of dust made travel disagreeable. Good rains on the closing days of August came in time to materially improve the apple crop.

In this connection the following comparison of local meteorological records for July and August last year and for the same months in the current year are interesting:

	1913 July and August	1914 July and August
Mean temperature	83	80
Total rainfall, inches	2.08	3.63
Sunshine, percentage of	82	76
Mean Relative Humidity	56	65
Number of cloudy days	8	13

From these data it will be noted that the unfavorable conditions in July and August last year were more severe than experienced in those months this year.

The rainfall in each of the last five summers, considering June, July and August as the summer months, has been much below the normal for this vicinity. Oregon, Mo., located about twenty miles northwest of St. Joseph, has a reliable precipitation record covering a period of sixty years, and using this re ord as a basis of calculation, the average summer rainfall St. Joseph for the last five years has been only fifty-four p cent of the normal amount. At Oregon the average summe rainfall for the last half decade has been ten per cent less tha at St. Joseph, being only 5.72 inches, or forty four per cent normal. As might be expected the mean temperature for t five summers in question has been above normal, the averag daily excess amounting to 1.9 degrees.

The detrimental effects of the repeated adverse weath conditions have been numerous. The subsoil is generally drie than ever before known, and this dryness caused many spring and wells to go dry. The growth of trees has been checked an an unusually large number of shade and orchard trees have die within the last two years. Losses have also been noticeable i the woods in this section. While relatively few whole trees hav perished, dead branches and limbs of forest trees are unusuall numerous. Grass in pastures has shown a marked tendency t give way to weeds as a result of the successive drouths.

On the other hand excessive rainfall has not been uncommon in this locality in June, July and August. According t the Oregon record the half decade having the most excessive summer rainfalls covers the years 1899 to 1903, inclusive, when th average summer rainfall was 17.41 inches, or thirty three pe cent above normal. By dividing the Oregon record of sixt years—1855 to 1914—into three twenty-year periods, it is foun that the average summer rainfall for any one of the three perio varies by less than eight-tenths of an inch from the average the whole period, which is 13.10 inches.

Dated St. Joseph, Mo., September 17, 1914.

Stack
UNIVERSITY OF ILLINOIS
NOV 1914

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

OCTOBER, 1914

BY

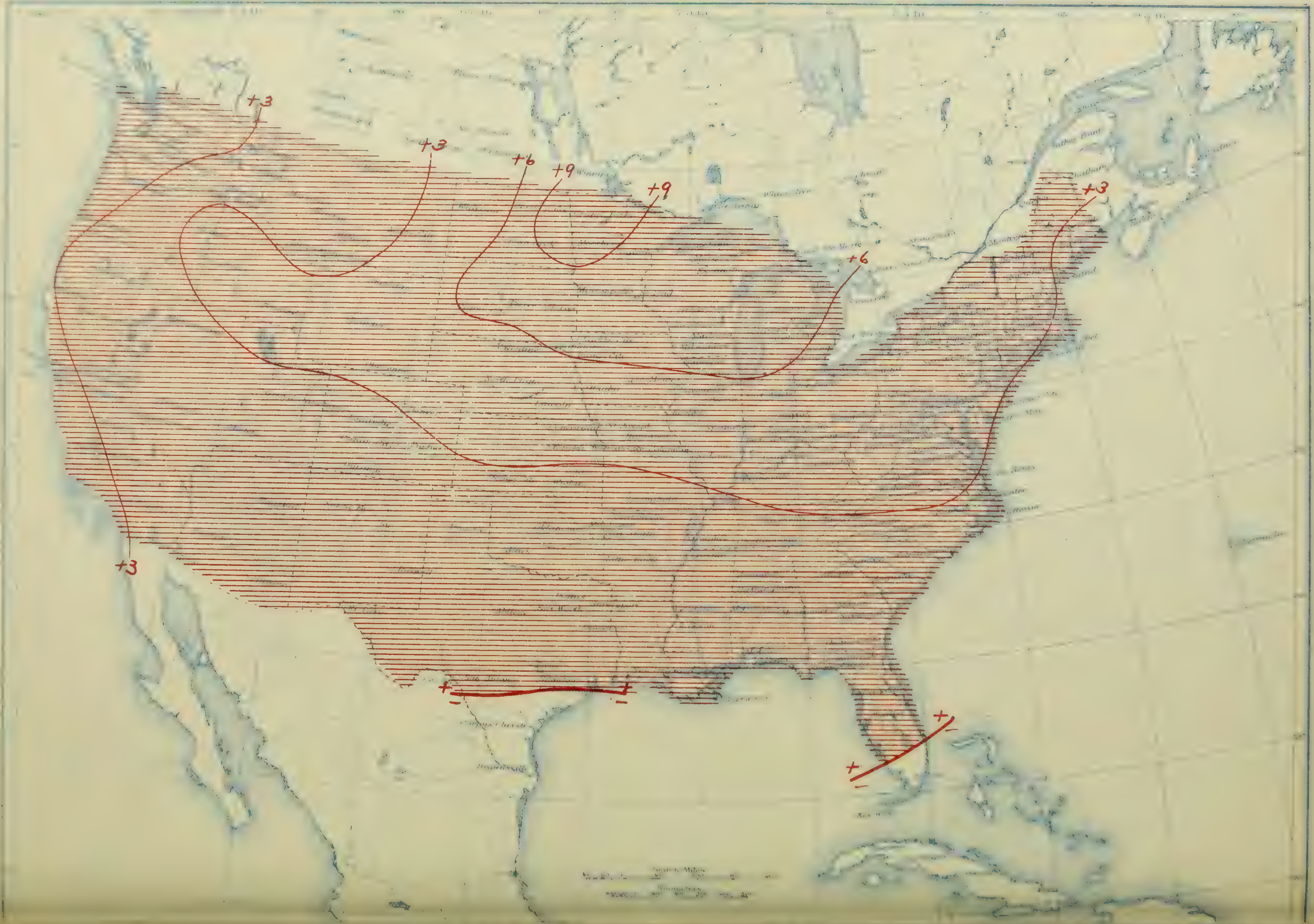
GEORGE REEDER

SECTION DIRECTOR

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
NOVEMBER 18, 1914.

Departure of the Mean Temperature from the Normal, October, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

Vol. XVIII. Columbia, Mo., October, 1914. No. 10

GENERAL SUMMARY.

October, 1914, was characterized by mild temperatures hroughout, humid air and frequent showers from about the 5th o the 25th, and nearly ideal weather during the closing days.

The soil was in good condition for the germination and growth of early sown wheat, but in some localities it was too vet for preparing for late sowing until near the close of the month.

All corn had matured before the first killing frost, which lid not occur until the 27th—about 10 to 15 days later than the verage. The late coming of frost gave opportunity for fine growth in late forage crops and fall pastures, which, so it is reported, were never better.

PRESSURE.

The mean atmospheric pressure, reduced to sea-level, was lightly above the normal. No unusually high or low pressures rossed the State. Depressions prevailed more or less from bout the 7th to the 15th, passing near or across the State, resulting in daily showers. The most marked high crossed the state on the 26th—27th, attended by fine weather; also the owest temperature of the month, and the first killing frost of he season.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 71 stations, was 59.2°. The mean departure from he normal for 54 stations having 10 or more years record was +2°. The highest local monthly mean was 63.0° at Caruthersville, and the lowest was 56.2° at Maryville. The highest temperature recorded during the month was 88° at Clinton and Harrisonville on the 1st. The lowest was 19° at Bethany on he 27th. The minimum temperature was 32° or lower on one lay in the northwest plateau; 3 in the Ozark plateau, and 2 in he other three divisions. There was a temperature excess in all livisions; in the Ozark plateau it averaged slightly less than 1; n the southeast lowlands 2.6; northeast plain 2.4; southwest plain 1.8, and northwest plateau 2.9.

HUMIDITY.

The mean relative humidity was about 10 per cent above normal. From about the 5th to the 20th was the most humid part of the month, the remainder being relatively drier.

PRECIPITATION.

The average precipitation for the State, 80 stations reporting, was 4.54 inches. The departure from the normal for 67 stations having 10 or more years record was +2.04 inches. The monthly averages and departures for the five divisions of the State were as follows: Northeast plain 4.86 inches, excess 2.48 inches; southeast lowlands 4.43 inches, excess 1.79 inches; Ozark plateau 4.13 inches, excess 1.66 inches; southwest plain 5.30 inches, excess 2.81, and northwest plateau 4.19 inches, excess 1.54 inches. The greatest local monthly precipitation was 10.68 inches at Gano, and the least was 1.20 inches at Hollister. Excessive amounts of 2.50 inches or more in 24 hours occurred at 20 or more stations, the greatest being 5.40 inches at Gano on the 10th.

The average number of days with 0.01 inch or more of precipitation was 7.

WIND.

The prevailing winds were from the southeast. Thunderstorm squalls occurred on the 9th, 12th and 26th; on the last named date the velocity reached a strong gale in the western part of the State.

SUNSHINE AND CLOUDINESS.

There was more cloudiness during the month than is usual in October; this was especially true of the first three weeks. In the eastern half of the State the sunshine was about 20 per cent below normal, but in the western half it was not as much as this. The average number of clear days was 14, partly cloudy 6, and cloudy 11.

MISCELLANEOUS PHENOMENA.

Fogs—5th, 15th, 17th, 18th and 27th.

Frost, Killing—27th.

Halos, Lunar—1st, 2d, 4th, 18th, 27th and 28th.

Halos, Solar—22d.

Thunderstorms—7th, 8th, 9th, 10th, 11th, 12th, 14th, 15th and 21st.

ERRATA FOR SEPTEMBER, 1914.

Fruit City—Days with .01 inch or more precipitation should be 6.

Houston—24 hour precipitation should be 3.00 inches on the 15th.

Neosho—Days partly cloudy should be 10.

Poplar Bluff—Days partly cloudy should be 4.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE.		WIND.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement miles	Average hourly velocity	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	30.04	90	......	167	48	4,712	6.3	25	nw	26
Hannibal	30.05	88	......	......	......	5,257	7.1	26	n	26
Kansas City	30.05	77	66	196	57	8,566	11.2	42	n	9
St. Joseph	30.05	87	69	190	55	5,763	7.7	32	nw	12
St. Louis	30.06	85	74	162	47	7,599	10.2	36	n	26
Springfield	30.07	85	68	179	52	6,864	9.2	44	nw	6
Cairo, Ill	30.06	91	73	......	......	4,938	6.6	37	nw	9
Keokuk, Iowa	30.06	87	73	199	58	4,213	5.7	22	nw	29

COMPARATIVE DATA FOR OCTOBER.

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 or more
1888	53.6	−3.5	89	24	2.65	+0.21	....	7
1889	53.8	−3.3	91	27	2.50	+0.06		6
1890	54.8	−2.3	91	22	2.24	−0.20		6
1891	55.7	−1.4	98	19	1.11	1.33		3
1892	57.5	+0.6	95	16	2.28	−0.16	2.40	5
1893	56.7	−0.4	95	16	0.99	−1.45	2.81	10
1894	57.6	+0.5	94	18	1.74	−0.70	3.52	6
1895	51.2	−5.9	89	15	0.35	−2.09	1.20	2
1896	54.1	−3.0	90	19	2.48	+0.04	2.68	5
1897	62.5	+5.4	99	23	0.71	−1.73	1.70	3
1898	53.5	−3.6	94	19	4.23	+1.79	4.51	8
1899	62.4	+5.3	100	24	2.93	+0.49	2.53	5
1900	62.4	+5.3	92	25	4.18	+1.74	4.04	7
1901	60.1	+3.0	96	24	1.64	−0.80	2.98	6
1902	59.5	+2.4	88	23	2.52	+0.08	2.69	5
1903	57.2	+0.1	90	19	2.85	+0.41	3.80	6
1904	57.6	+0.5	90	19	0.90	1.54	2.46	3
1905	55.1	−2.0	90	20	4.64	+2.20	7.24	5
1906	56.3	−0.8	94	17	0.87	−1.57	1.55	10
1907	56.7	−0.4	94	18	2.90	+0.46	3.46	7
1908	56.3	−0.8	92	21	2.74	+0.30	4.90	5
1909	57.2	+0.1	96	20	2.77	+0.33	2.57	6
1910	59.4	+2.3	94	15	2.71	+0.27	5.50	5
1911	56.9	−0.2	96	25	3.30	+0.86	5.12	8
1912	59.1	+2.0	97	21	3.83	+1.39	5.12	
1913	54.7	−2.5	93	11	4.46	+1.91	2.80	9
1914	59.2	+2.0	88	19	4.54	+2.04	5.40	7

Climatological data for October, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	38	...	...	...	...	...	...	...	3.98	+1.21	1.95	0	7	17	0	14	se.	C. Randecker.
Brunswick	Chariton	652	36	59.2	+2.7	81	1†	26	27†	39	5.42	+2.56	3.02	0	8	13	2	16	e.	Louis Benecke.
Columbia	Boone	784	26	58.8	+4.0	84	6	25	27	36	5.14	+2.72	1.86	0	8	11	4	16	se.	U. S. Weather Bureau.
Fayette	Howard	725	32	57.6	+0.6	80	1†	26	27	36	5.14	+2.71	3.63	0	6	15	2	14	...	Prof. T. B. Smith.
Fulton	Callaway	818	24	58.9	+1.3	87	6	23	27	42	3.93	+1.47	1.15	0	9	15	0	16	s.	L. A. Higley.
Glasgow	Howard	618	37	...	...	...	...	...	...	...	6.68	+4.21	4.50	0	5	15	2	14	e.	J. J. Shaughnessy.
Gorin	Scotland	700	28	...	...	...	...	...	...	...	4.19	+1.91	2.53	0	5	16	3	12	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	58.8	+2.9	83	6	26	27	33	3.69	+2.05	2.75	0	8	15	8	8	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	...	...	...	...	...	...	...	5.26	+2.58	2.40	0	11	8	6	17	se.	C. T. Maushund.
Jefferson City	Cole	628	33	59.1	+2.4	86	6	28	27†	36	5.85	+3.56	1.62	0	10	18	0	13	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	...	...	...	...	...	...	...	4.49	...	2.76	0	6	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	500	37	59.1	+3.3	86	6	24	27	37	5.92	+3.65	4.15	0	7	20	4	7	se.	J. T. Farrell.
Macon	Macon	881	16	59.1	+0.6	83	1	24	27	35	4.35	+1.34	1.30	0	10	15	5	11	sw.	John A. Cook.
Mexico	Audrain	797	37	58.4	+1.8	87	6	24	27	41	4.74	+2.52	2.25	0	10	14	3	14	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	60.3	+1.5	85	6†	24	27	35	5.59	+2.99	1.71	0	8	6	14	11	s.	F. E. Steines.
Paris (near)‡‡	Monroe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W. H. Beacom
Palmyra	Marion	652	3	56.8	...	84	7	24	27	37	2.93	...	1.67	0	7	16	5	10	sw.	W. B. Markell.
St. Catharine	Linn	914	2	57.9	...	78	1	24	27	34	4.13	...	2.06	0	10	15	9	7	se.	L. D. Baker.
St. Charles	St. Charles	614	37	60.2	+2.5	84	6	27	27	37	4.40	+1.98	1.50	0	5	16	9	6	nw.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	60.8	+2.4	82	6	31	27	26	7.45	+5.04	3.35	0	7	12	9	10	s.	U. S. Weather Bureau.
St. Louis(2)	do	578	4	60.3	...	83	6	31	27	28	8.32	...	2.90	0	7	13	6	12	se.	St. Louis University.
Steffenville	Lewis	576	22	60.3	+3.4	85	2†	21	27	40	2.62	+0.52	1.03	0	7	15	7	9	w.	Frank Hall.
Unionville	Putnam	1,072	22	59.1	+4.0	84	1†	20	27	40	4.31	+2.11	1.40	0	11	10	7	14	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	58.7	...	84	7	27	27	32	3.55	...	2.80	0	3	14	8	9	sw.	C. B. Ellis.
Warrenton	Warren	865	25	58.4	+2.9	84	5	24	27	36	4.60	+2.05	1.51	0	6	12	8	11	nw.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cardwell	Dunklin	...	4	62.2	...	84	5†	25	28	41	3.33	...	1.10	0	5	20	3	8	n.	E. M. Perry.
Caruthersville	Pemiscott	...	24	63.0	+2.6	86	1†	31	28	33	5.53	+2.92	2.82	0	9	16	4	11	se.	H. E. Averill.
Doniphan	Ripley	440	11	59.0	+1.5	81	6†	25	28	38	3.27	+0.31	1.55	0	7	16	5	10	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	62.4	-5.3	85	5†	28	27	42	5.40	+2.45	3.03	0	5	9	12	10	s.	L. M. Bean.
Marble Hill	Bollinger	420	23	59.6	+2.1	83	6	29	28	37	6.18	+3.79	3.60	0	5	15	11	5	n.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	...	...	...	...	...	...	...	4.72	+1.38	1.90	0	5	12	2	17	se.	Miss Josie Smith.
Patton (near)‡‡	Bollinger	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Christian Seabaugh
Poplar Bluff	Butler	333	11	61.4	+1.4	85	7†	27	28	43	5.49	+2.66	2.50	0	4	8	1	22	...	M. S. Wiseheart.
Sikeston	Scott	328	15	62.0	+2.6	84	6	30	27†	36	3.48	+1.02	2.04	0	5	11	14	6	sw.	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	44	61.5	+2.4	84	6	32	27	27	2.45	−0.18	1.47	0	7	12	6	13	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	11	...	...	...	...	...	...	...	3.33	+1.22	1.20	0	6	13	5	13	se.	G. V. Randolph.
Belle	Maries	1,000	22	60.4^{e}	+0.9	87	6	26	27	41	6.24	+3.90	1.70	0	6	5^{e}	17^{e}	4^{e}	w.	A. J. Wofford.
Birchtree	Shannon	1,200	22	58.6^{d}	+0.6	80	6†	27	27	34	1.79	−0.76	0.68	0	4	14	6	11	n.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	59.2	+0.8	84	6	24	27	36	3.77	+1.04	1.35	0	8	13	8	10	se.	A. C. Fink.
Cassville	Barry	1,500	4	58.6	...	87	6	23	27	47	1.99	...	1.20	0	6	12	11	8	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	4	57.0	...	79	7	25	27	39	4.83	...	1.55	0	6	21	0	10	...	Roy W. Reed.
Dean‡‡	McDonald	1,000	16	59.0	−1.2	85	7	25	27	43	3.47	+0.48	2.16	0	5	18	3	10	e.	H. E. Dean.
Duncan	Webster	...	2	57.0	...	83	6	24	27	37	2.79	...	1.05	0	7	15	2	14	s.	C. A. Mingus.
Eldon	Miller	934	16	58.6	...	85	6	24	27	36	7.15	+5.03	2.98	0	10	8	19	4	se.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	61.2	...	82	6	28	27	35	4.39	...	2.90	0	4	14	4	13	nw.	R. C. Walton.
Gano ‡‡	Dent	...	12	58.4	+0.6	86	6	25	27	37	10.68	+7.57	5.40	0	7	16	4	11	s.	A. C. Leach.
Goodland	Iron	1,000	10	56.8	+1.1	82	8	22	27	42	5.73	+1.91	2.70	0	4	17	3	11	s.	F. M. Adams.
Hollister	Taney	1,000	5	57.0	...	86	8	28	28†	40	1.20	...	1.05	0	2	17	0	14	sw.	W. P. Chapmann
Houston	Texas	1,280	23	57.9	+0.9	81	8	26	27	36	4.17	+1.70	1.15	0	6	15	4	12	sw.	R. F. Harmon.
Ironton	Iron	925	37	57.4	+1.5	83	6†	24	27	42	4.98	+2.31	2.20	0	6	11	6	14	n.	W. H. Delano.
Koshkonong	Oregon	911	15	60.0	+0.4	83	6	29	27	32	2.62	−0.09	1.22	0	7	12	5	14	sw.	J. W. Hitt.
Lebanon	Laclede	1,105	27	60.8^{g}	+2.3	84	6†	23	27	46	5.83	+3.20	3.00	0	7	18	2	11	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	58.2	...	82	8	26	27	35	2.46	−0.60	0.98	0	7	15	6	10	se.	C. S. Crow.
Mountain Grove	Wright	1,490	16	57.4	−0.1	81	8	25	27	37	4.05	+1.25	0.87	0	8	9	6	16	nw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	58.4	−0.8	83	6	27	27	39	2.12	−1.20	1.03	0	6	18	4	9	nw.	J. R. White & Son.
Neosho	Newton	1,083	32	60.0	+0.8	85	7†	25	27	41	3.02	−0.16	1.53	0	8	20	3	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	58.6	+3.9	84	8	26	27	40	6.74	+4.30	3.40	0	6	16	8	7	nw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	58.8	+1.5	82	8	28	27	26	2.84	+0.04	0.78	0	6	14	3	14	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	...	...	...	...	...	...	...	2.95	+0.44	1.60	0	5	13	8	10	n.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	60.2	...	84	6†	25	27	40	4.60	...	2.00	0	7	15	3	13	nw.	Darby Fruit Farm.
Appelton City	St. Clair	853	25	59.6	+0.6	82	2†	27	27	42	5.25	+3.00	2.90	0	2	8	21	2	s.	Mark Brown.
Clinton	Henry	800	28	60.2	...	88	1†	27	27	45	6.47	+4.10	2.25	0	7	12	13	6	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	58.2	+2.3	88	2	26	27†	38	3.79	+1.21	1.62	0	9	9	3	19	nw.	A. J. Sharp.
Joplin	Jasper	975	35	...	...	...	...	...	...	...	...	...	...	0	...	17	4	10	n.	Joplin High School.
Lamar	Barton	964	33	60.3	+1.6	86	8	27	27†	37	2.30	−0.71	1.11	0	6	12	8	11	s.	E. H. Adams.
Lamonte	Pettis	863	27	60.0	...	84	4	22	27	37	3.35	+1.25	0.95	0	9	16	5	10	nw.	J. Ed. Hall.
Marshall	Saline	779	25	58.6	+1.7	82	1†	24	27	37	7.69	+5.26	4.30	0	8	16	7	8	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	...	...	...	...	...	...	...	5.59	+2.98	2.40	0	6	8	21	2	se.	C. Jewell.
Warrensburg	Johnson	883	36	60.2	+2.2	84	1	26	27	37	6.18	+3.63	2.65	0	11	12	6	13	se.	Geo. H. Collins.
Warsaw	Benton	883	11	60.0	+2.1	87	7	24	27	48	7.78	+4.58	2.97	0	8	15	10	6	sw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	...	30	59.6	+2.1	84	1	24	27	30	4.11	+0.69	2.10	0	7	17	9	5	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	22	59.0	+5.2	82	1†	19	27	43	2.56	+0.13	1.05	0	9	8	11	12	se.	M. H. Moulton.
Conception	Nodaway	982	29	57.4	+1.9	79	6	26	27	31	4.52	+2.08	3.08	0	8	10	10	11	se.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	58.2	+3.4	82	2	23	27	38	3.27	+0.48	1.03	0	8	18	2	11	s.	W. H. Campbell.
Kansas City	Jackson	963	27	60.0	+4.2	80	6	30	27	28	5.65	+3.44	2.38	0	12	12	7	12	se.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	59.4	+3.3	81	1	24	27	32	4.76	+2.04	2.00	0	11	11	7	13	nw.	J. F. Sharp.
Lexington	Lafayette	813	33	59.4	+1.8	82	1	24	27	38	4.13	+1.55	1.63	0	9	16	1	14	s.	J. W. Keithley.
Liberty	Clay	864	27	59.6^{d}	+2.4	85	5	24	27	39	4.68	+2.49	1.75	0	8	13^{b}	8^{b}	8^{b}	e.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	56.2	+2.9	82	7	22	27†	37	4.13	+1.72	2.43	0	11	12	2	17	s.	J. R. Brink.
Oregon	Holt	1,113	60	57.7	+2.8	78	6	23	27	30	3.00	+0.36	0.65	0	10	16	5	10	se.	Tom Curry.
St. Joseph	Buchanan	967	43	58.8	...	82	6	25	27	33	3.16	+0.57	1.36	0	10	12	9	10	se.	U. S. Weather Bureau
Tarkio	Atchison	...	3	57.5	...	81	6	21	27	38	4.96	...	2.62	0	10	15	6	10	sw.	John F. Frazier
Trenton	Grundy	812	20	57.9	+2.1	79	7	26	27	28	5.48	+2.99	2.72	0	11	13	7	11	se.	W. H. Estes.
State means and extremes		...	...	59.2	+2.0	88	1†	19	27†	48	4.54	+2.04	5.40	0	7	14	6	11	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc.

† Also on other dates. ‡‡Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D No. 1.

Daily precipitation for October, 1914.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
Boonville ‖	Missouri					.04			1.95	.80	.58		.46		.07	.08	T.					T.											3.98
Brunswick ‖	Grand					.07			3.02	.68	1.02		.34	.04	.20	.05																	5.42
Columbia***	Missouri				T.	T.		1.63	.59	1.57	T.		.73	T.	.20	.29	.12					T.			.01								5.14
Fayette	......do					T.		1.75	1.88	.32	.63		.46		.10										T.								5.14
Fulton	......do							.02	.75	1.15	.50		.65		.12	.02	.64	.08															3.93
Glasgow ‖	......do								4.50	.63	1.10		.43		.02	T.																	6.68
orin	Mississippi							.49	.79		2.53		.09		.29																		4.19
Hannibal***	......do				T.	.03		1.96	.81	.01	.20		.03	T.	.07	T.	.58								T								3.69
Hermann ‖	Missouri								.30	2.40	.84		.38	.02	.06	.02	.76	.45							.02	.01							5.26
Jefferson City ‖	......do								.85	1.62	1.40		.70	.05	.05	.20	.48	.35					.15										5.85
Keytesville	Chariton					T.	T.		2.76	.23	1.07	.33	.03	.07																			4.49
Louisiana	Mississippi					T.			4.15	.26	.31		.05			1.00	.05								T.			.10					5.92
Macon	Chariton					.01		1.30	1.10	.20	1.22		.25	.08	.09	.08	.02								T.								4.35
Mexico ‖	Mississippi					.01			2.25	.76	.83		.35	.02	.13	.05	.16	.18								T.							4.74
Oakfield	Meramec								1.11	1.30	.65		T.			.35	1.71	.43				.02			.02								5.59
Paris (near)	Salt																																
Palmyra ‖	Mississippi								1.67	.44	.29	.03	.04				.12	.34															2.93
St. Catherine	Grand					.01	.03	.89	.58	.13	2.06	.01	.29	.02	.11	T.	T.																4.13
St. Charles	Missouri								1.32	1.07	.50		.01			1.50	T.								T.								4.40
St. Louis (1)***	Mississippi				T.			T.	1.91	1.33	.33		.07			1.29	2.41	.11							T.								7.45
St. Louis (2)	......do				T.	T.			2.90	1.47	.38		.11			1.26	1.93	.27															8.32
Steffenville	......do					T.		1.03	.75	.42			.14	.06	.05	T.	.17																2.62
Unionville ‖	Grand					.12	.60	.50	.80	.30	1.10		.08	T.	.25	.30	.10						T.		.16								4.31
Vandalia	Mississippi								2.80	.30	.45					T.																	3.55
Warrenton ‖	......do							.85	1.51	.72		.15				1.15	.22																4.60
Southeast Lowlands.																																	
Cardwell	Mississippi		T.	.12						.90	.85						1.10				.36												3.33
Caruthersville	......do	T.	.09	.20				T.	T.	2.82	.50		.26	.50			.30	.31			.55												5.53
Doniphan	Black			T.	T.				T.	.54	1.55		.50	.30			.32			T.	.03	.03											3.27
Jackson	Mississippi								3.03	.95			.23	.02			1.17																5.40
Marble Hill	......do									3.60	.63		.40				.93	.62															6.18
New Madrid	......do				T.					1.90	1.10			.65				.96				.11											4.72
Patton (near)	......do																																
Poplar Bluff	Black								T.	1.57	2.50			.61			T.	.81			T.												5.49
Sikeston	Mississippi			.04						2.04	.40		.40	T.			.60	T.															3.48
Cairo, Ill.***	......do		T.	T.					.36	1.11	.28		.12	.21			.33	.04								T.	T.						2.45
Ozark Plateau																																	
Arlington	Gasconade									1.10	1.20			.30			.45	.16							T.	.12	T.						3.33
Belle	Meramec								1.08	1.70	1.20			T.		.55	1.33	.38				T.											6.24
Birchtree	Black								.18	.65	.28						.68																1.79
Bolivar	Osage							.10	.10	.60	.95		1.35		.07	.25	.35																3.77
Cassville	White									.16	.02					.43	.05			.13		1.20											1.99
Crocker	Gasconade							.04	1.00	1.55			.52				1.45					.27											4.83
ean	Neosho								T.	.11					1.10	.08						2.16				.02							3.47
Duncan	Osage				.01				T.	.22	1.05		.44		T.	.18	.35				T.	.54			T.	T.						T.	2.79
Eldon	......do							1.15	.80	2.98	.63		.75	T.	.11	.22	.40					.10			.01	T.							7.15
Fruit City	Black									1.10	2.90						.35	.04															4.39
ano	Meramec								1.17	2.90	5.40		.30		T.	.13	.66	.12							T.	T.							10.68
Goodland	Black									2.15	2.70		.28				.60																5.73
Hollister	White															.15						1.05											1.20
Houston	Gasconade								.55	1.15	.73		.32			T.	.64					.78											4.17
Ironton	Mississippi					T.			T.	2.20	1.70			.40			.45	.16				.07											4.98
Koshkonong	Black			.05					.25	1.22	.33		.51	T.		T.	.20				.06												2.62
Lebanon ‖	Osage									3.00	1.00		1.20			.10	.30					.15				.08							5.83
Lockwood	......do								T.	.12	.98		.94			.06	.09	.05				.22											2.46
Mountain Grove ‖	White									.83	.21	T.	.22	.54			.87	.32				.28	.78										4.05
Mount Vernon	Neosho									.06			.77		.10	.09	.07					1.03											2.12
Neosho	......do						T.			.35	T.		.62		.11	.34	.01				.03	1.53				.03							3.02
Rolla	Meramec								.79	3.40	.70		.50			T.	1.30	.05							T.	T.							6.74
Springfield***	White					T.		T.	T.	.72	T.		.78	T.	.19	.28	.23					.64			T.								2.84
Wheatland	Osage							.05	.80						1.60	.20									.30								2.95
Southwest Plain.																																	
Amoret	Osage						.10	.08	1.07	1.15			2.00	T.	.12	.08									T.								4.60
Appleton City	......do								2.90	2.35																							5.25
Clinton	......do				.15		.12		2.00	2.25	.25	1.50	.20																				6.47
Harrisonville ‖	......do					.12			.12	1.62	.78		.91		.08	.12	.02									.02	T.						3.79
Joplin	Neosho																																
Lamar ‖	......do								T.	.10	.58		1.11	T.	.03	.24	T.				T.		.24		T.	T.							2.30
Lamonte	Missouri					.15		.75	.50	.30	.30		.95	.10	.15	.15	T.								T.	T.	T.						3.35
Marshall	......do					.23	T.	1.04	4.30	.74	.80		.43	.08	.07	T.	T								T.	T.							7.69
Nevada	Osage				T.		.63	.10		1.90	.26		2.40		.30														T.				5.59
Warrensburg	Missouri					.05	.05	2.65	.93	.58	.35		1.28	T.	.09	.10	T.					.03	.07		T.								6.18
Warsaw	Osage					T.	T.	.40	2.07	2.97	.87		1.24	T.	.08	.10	.05								T.	T.							7.78
Northwest Plateau.																																	
Avalon	Grand							1.18	.12	.22	2.10		.31	.06	.12																		4.11
Bethany	......do					.04	.13	.07	1.05	.55	.35		T.	.15	.18								.04										2.56
Conception	Missouri					.19	.09	.27	3.08	.40		.23		.11	.15	T.						T.											4.52
Grant City	Grand					.05	.18	.28	1.03	.83	.56		.12	T.	.22	T.						T.	T.		T.								3.27
Kansas City***	Missouri				T.	.09	.01	.43	1.38	2.35	.03	.12	.99	.07	.15	T.						.02		T.	T.	.01							5.65
Kidder ‖	Grand					.18	.05		1.40	.47	2.00		.14		.24	.16							.05		.05		.02						4.76
Lexington ‖	Missouri					.04			1.63	.82	.67		.60		.26	.05										.02	.01						4.13
Liberty	......do			.17				.16	1.35	.42	1.75		.55	.03	.25	T.																	4.68
Maryville ‖	......do					.27	.06	.06	2.43	.41	.50		.05	.06	.20	.08	.01						T.										4.13
Oregon	......do				T.	.55	.05	.26	.45	.65	.15		.23	.44	.21							.01											3.00
Pattonsburg ‖	Grand																																
St. Joseph***	Missouri				T.	.35	.20	.82	.75	.61		.13	.04	.11	.14	T.						.01			T.								3.16
Tarkio	......do					.08	.47	.08	2.62	1.09	.08	.04	.13	.32	.05																		4.96
Trenton	Grand				.02		.57	1.12	.48	2.72		.11	.02	.11	.18	T.	T.					.04		.11	T.	T.							5.48

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

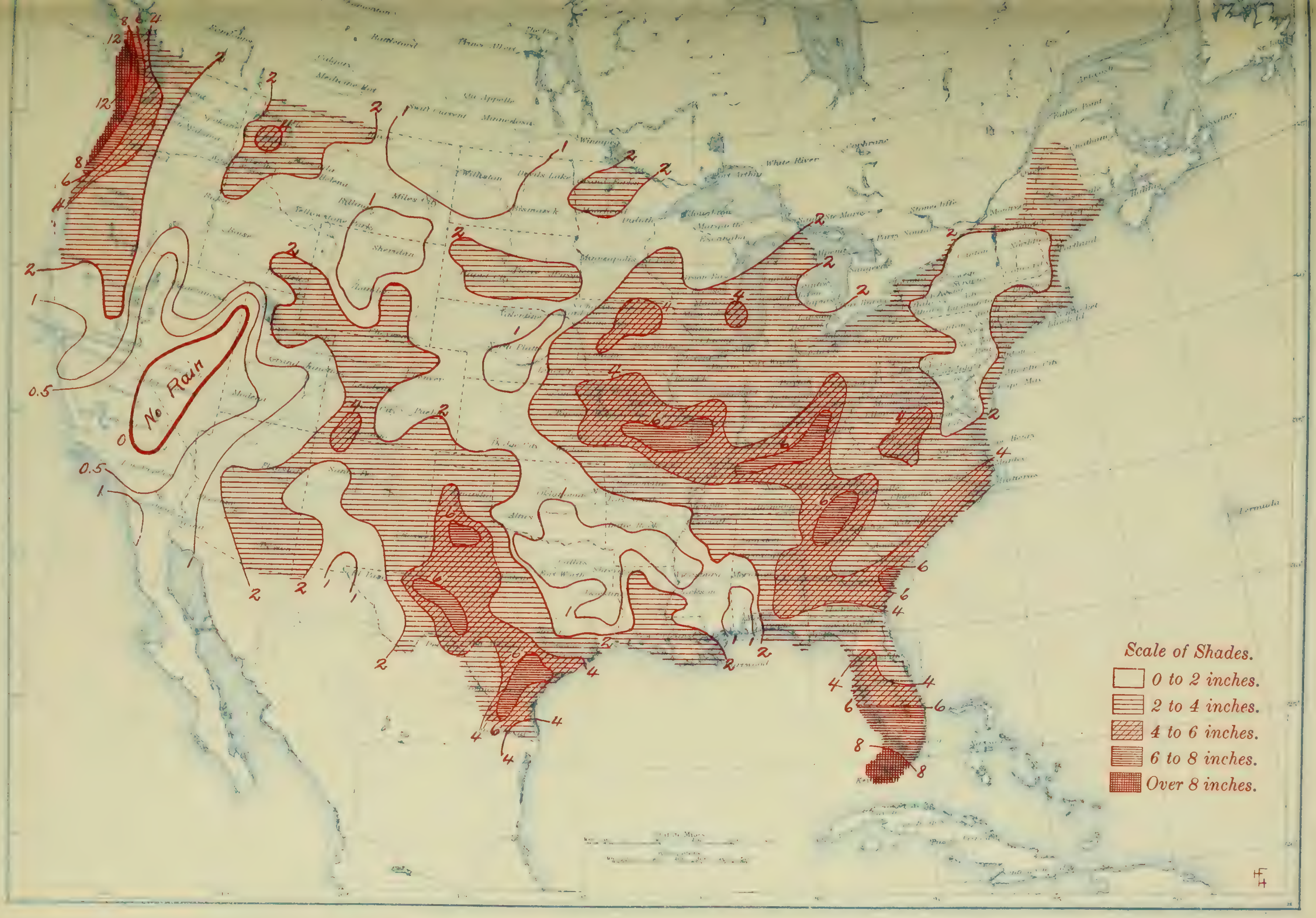
T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight. **Amount included in following observation.

Daily temperatures for October, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	81	80	72	69	71	81	75	77	75	70	71	57	50	57	60	62	73	77	86	77	78	67	81	58	49	50	52	63	61	73	72	68.4
	Minimum	51	53	55	66	61	61	65	62	63	58	46	51	47	46	48	49	45	45	50	52	57	62	55	[illegible]	48	42	29	40	29	31	[illegible]	[illegible]
Columbia	Maximum	81	79	75	71	80	84	83	71	74	68	68	59	49	56	56	66	70	75	75	74	72	77	78	58	51	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	54	52	56	55	62	64	61	62	60	50	43	48	46	46	48	52	48	45	53	53	59	61	52	[illegible]	44	[illegible]	25	24	[illegible]	34	[illegible]	[illegible]
Fayette	Maximum	80	80	73	71	78	79	78	72	71	67	68	58	47	53	56	61	70	75	78	73	68	76	75	[illegible]	49	[illegible]	47	58	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	52	54	55	62	62	60	60	58	52	45	47	46	45	48	51	47	43	51	51	58	57	53	48	42	[illegible]	26	32	[illegible]	[illegible]	45	[illegible]
Hannibal	Maximum	79	75	77	74	78	83	83	77	72	68	70	61	50	56	59	56	69	74	78	75	77	77	76	58	58	48	48	58	[illegible]	66	[illegible]	[illegible]
	Minimum	54	51	54	56	63	60	63	62	62	53	45	49	47	48	50	53	50	44	52	51	61	56	51	[illegible]	40	32	29	35	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	81	80	76	77	84	86	81	78	74	65	71	62	52	56	56	60	72	77	[illegible]	75	75	75	76	58	53	50	50	66	65	70	75	[illegible]
	Minimum	49	50	51	55	60	60	61	62	61	58	45	48	46	46	46	49	49	44	50	51	54	59	52	54	38	44	28	28	[illegible]	34	33	[illegible]
Macon	Maximum	83	80	77	74	79	82	82	75	72	69	71	61	50	57	61	63	71	76	79	78	72	75	79	65	[illegible]	40	49	50	63	70	75	[illegible]
	Minimum	53	48	53	53	60	60	64	60	60	57	41	48	45	46	47	51	49	45	48	53	55	56	51	50	44	39	24	31	[illegible]	35	[illegible]	[illegible]
Mexico §§	Maximum	82	78	78	73	81	87	85	77	72	68	72	61	50	57	58	56	71	76	81	77	74	81	78	56	60	52	52	62	64	70	[illegible]	[illegible]
	Minimum	48	46	52	57	57	59	57	60	61	68	43	41	45	45	47	49	51	43	45	49	52	58	48	48	46	42	24	25	[illegible]	31	[illegible]	[illegible]
Oakfield	Maximum	80	80	78	71	82	85	82	85	73	67	70	65	55	58	62	56	70	75	77	72	78	78	77	65	61	57	50	[illegible]	63	70	74	[illegible]
	Minimum	57	52	57	57	59	60	61	61	59	57	47	50	45	46	45	49	53	45	52	57	58	59	54	53	48	40	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	78	76	74	72	73	77	76	74	71	68	68	62	51	53	58	61	67	71	74	74	69	75	74	71	51	48	46	58	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	54	55	55	56	61	64	65	61	60	57	45	48	45	43	47	51	45	46	50	51	58	52	53	50	42	37	25	34	[illegible]	32	[illegible]	[illegible]
St. Louis (1)	Maximum	77	79	80	73	78	82	81	81	70	68	67	64	53	58	60	58	68	73	73	73	78	77	77	65	55	54	47	62	62	[illegible]	71	[illegible]
	Minimum	61	56	62	60	62	64	64	63	61	58	53	51	48	48	46	52	52	52	56	60	62	60	58	51	48	35	31	30	[illegible]	[illegible]	[illegible]	[illegible]
Sublett	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unionville §§	Maximum	84	83	80	76	74	83	78	83	78	74	75	65	56	58	60	62	76	80	82	81	76	80	81	64	56	48	73	62	[illegible]	62	68	71.0
	Minimum	54	50	51	54	56	60	64	60	58	56	45	52	44	42	45	47	45	44	48	51	54	55	52	54	[illegible]	31	29	22	[illegible]	[illegible]	[illegible]	47.2
Warrenton §§	Maximum	80	80	74	81	84	83	74	70	65	58	61	53	55	58	54	68	73	73	75	75	[illegible]	75	74	57	57	[illegible]	50	61	60	70	71	67.6
	Minimum	55	52	52	59	58	60	60	61	58	46	50	46	47	46	50	52	48	52	52	54	56	56	51	52	46	43	24	25	35	[illegible]	41	49.2
Southeast Lowlands.																																	
Cardwell	Maximum	80	75	75	73	84	84	83	80	82	82	82	71	68	66	64	78	78	80	82	72	80	82	82	78	76	68	58	62	65	70	73	75.4
	Minimum	55	50	60	56	58	56	58	60	65	56	52	48	46	43	52	46	48	44	46	58	56	54	50	48	48	50	32	25	37	31	32	49.0
Caruthersville	Maximum	86	76	78	74	83	86	81	78	78	82	80	70	65	64	63	54	69	78	78	71	80	81	81	78	67	64	55	60	67	70	71	73.2
	Minimum	60	63	61	60	63	58	62	65	64	64	56	56	50	46	49	47	52	46	55	55	56	51	54	56	55	51	[illegible]	31	40	37	40	52.8
Doniphan	Maximum	78	72	70	72	78	81	80	81	76	75	70	67	64	56	58	55	70	74	74	65	76	78	77	75	63	61	53	60	65	69		69.8
	Minimum	54	56	55	55	54	54	57	62	60	59	47	46	43	43	47	44	51	40	48	57	54	51	48	49	51	47	28	25	24	33	..	[illegible]
Jackson	Maximum	80	80	83	77	85	85	82	80	83	75	73	74	66	65	65	61	72	80	78	77	[illegible]	82	[illegible]	82	77	73	70	65	62	70	75	75.5
	Minimum	54	54	55	56	58	55	56	57	56	60	50	48	47	44	45	50	52	43	48	59	56	54	50	53	52	45	28	30	[illegible]	33	36	49.2
Marble Hill	Maximum	82	79	79	78	82	83	80	80	73	72	73	72	61	60	62	56	60	77	75	67	79	81	80	73	60	61	62	62	61	[illegible]	70	71.3
	Minimum	53	52	52	53	52	54	56	54	60	61	49	45	47	43	45	52	42	52	46	46	56	51	49	50	52	46	32	25	40	32	34	47.9
Ozark Plateau.																																	
Birchtree	Maximum	..	78	68	67	78	80	75	80	74	71	70	....	....	52	55	54	....	75	70	66	68	77	77	68	58	58	52	[illegible]	64	70	70	68.1d
	Minimum	...	55	54	58	57	57	61	65	60	58	46	...	....	44	44	44	....	42	50	52	53	56	53	52	48	42	27	29	38	28	39	49.0d
Cassville	Maximum	79	79	73	74	85	87	85	85	76	72	74	72	55	51	58	61	65	80	77	70	71	75	78	65	55	58	56	66	66	74	72	70.8
	Minimum	61	39	51	56	55	52	54	58	59	53	63	53	38	42	45	46	40	39	42	56	60	52	47	55	50	38	23	23	28	27	39	46.3
Duncan	Maximum	77	73	65	68	78	83	70	81	70	70	...	70	55	51	73	56	74	75	72	64	69	64	71	62	54	55	50	62	62	76	70	66.5a
	Minimum	49	49	54	46	59	60	61	63	60	55	...	53	44	42	43	46	45	45	48	56	58	51	51	48	48	41	24	23	34	[illegible]	36	47.6a
Eldon	Maximum	79	80	74	70	81	85	83	73	74	68	70	66	49	58	53	60	70	78	80	73	73	79	79	61	52	56	53	61	64	72	72	69.2
	Minimum	53	51	52	54	59	61	62	61	59	50	43	46	44	43	46	48	45	45	51	54	58	54	51	49	47	35	24	31	30	36	44	48.1
Fruit City	Maximum	75	75	72	69	80	82	78	81	75	70	70	66	62	56	58	57	71	77	72	67	75	79	80	81	74	66	54	66	65	72	71	70.5
	Minimum	55	62	64	55	70	61	61	64	56	57	47	46	44	44	48	47	54	54	53	58	56	66	45	50	53	55	28	31	38	42	42	51.8
Gano	Maximum	83	80	76	70	81	86	78	85	78	70	72	66	55	59	57	56	68	76	72	66	72	81	78	66	68	55	50	64	62	69	72	70.1
	Minimum	46	45	47	53	56	59	60	60	57	56	45	50	35	43	44	47	50	40	39	50	56	54	57	49	44	40	25	32	35	33	41	46.7
Hollister	Maximum	82	80	70	72	78	84	84	86	82	76	74	72	56	52	50	54	60	68	66	64	65	76	78	68	58	60	55	50	66	66	74	68.8
	Minimum	62	44	52	54	52	54	52	54	52	50	46	44	42	40	42	41	40	38	46	48	50	48	50	52	50	40	30	28	28	34	34	45.2
Ironton §§	Maximum	80	77	76	71	81	83	80	83	74	67	71	67	53	58	62	56	70	75	73	65	78	78	78	65	54	60	51	[illegible]	65	69	71	69.4
	Minimum	46	46	50	56	55	51	53	63	59	58	43	43	46	38	46	48	54	37	45	53	54	48	45	46	49	43	24	26	36	27	31	45.5
Lebanon	Maximum	81	80	69	72	83	84	84	84	75	65	69	71	67	60	57	55	70	78	80	70	82	80	82	77	65	61	57	64	67	81	72	72.3
	Minimum	48	46	50	55	59	60	63	65	59	55	...	...	...	...	...	...	...	44	54	56	60	57	50	49	48	45	23	26	31	35	43	49.2g
Mountain Grove	Maximum	68	67	69	72	78	77	78	81	76	63	70	68	54	56	56	57	70	75	72	62	65	75	74	58	54	57	52	54	57	74	74	66.5
	Minimum	50	48	49	52	58	60	65	65	61	62	45	47	43	43	41	40	46	45	50	55	56	54	52	47	48	43	25	29	35	37	42	48.2
Neosho	Maximum	82	82	78	75	84	84	85	85	78	75	79	73	57	50	55	62	78	80	78	73	77	80	80	72	55	57	55	64	65	74	73	72.4
	Minimum	48	46	52	55	59	60	61	64	65	54	40	54	37	43	46	48	40	39	46	58	60	56	49	50	50	40	25	30	29	33	38	47.6
Rolla	Maximum	70	72	77	77	81	83	80	84	78	68	70	64	57	59	56	54	69	77	75	66	74	79	77	66	66	54	54	62	63	72	72	69.5
	Minimum	46	47	52	52	51	59	63	67	56	50	43	42	42	45	45	47	49	43	49	57	57	55	50	50	44	42	26	32	37	32	45	47.6
Springfield	Maximum	78	76	66	70	80	80	80	82	78	62	70	68	47	48	52	58	71	75	73	63	68	73	74	63	52	54	49	59	61	69	69	66.7
	Minimum	61	57	58	59	59	63	63	65	56	55	51	46	43	42	45	47	46	49	57	58	60	58	59	51	48	54	28	36	[illegible]	43	46	51.0
Southwest Plain																																	
Amoret	Maximum	81	81	79	77	82	84	84	80	76	75	74	73	54	57	52	66	76	80	79	72	77	79	78	71	60	55	54	65	68	74	73	72.1
	Minimum	50	51	55	57	62	63	63	60	59	55	44	49	39	43	46	46	42	40	49	53	55	58	58	50	40	38	25	35	36	34	44	48.3
Clinton	Maximum	88	88	86	79	87	79	84	81	83	76	74	55	51	55	57	64	80	84	81	75	80	80	82	68	57	62	56	61	68	72	75	73.2
	Minimum	48	45	41	55	61	55	61	56	55	55	44	50	45	45	47	50	42	42	48	54	58	58	62	52	37	46	27	31	32	32	41	47.3
Harrisonville §§	Maximum	81	88	85	75	77	80	78	74	75	69	71	60	50	55	52	64	71	77	76	73	72	76	76	55	52	52	48	63	65	72	72	68.8
	Minimum	50	51	58	58	53	63	55	63	60	57	43	46	42	43	46	46	41	40	43	51	55	60	57	51	48	40	26	26	36	34	34	47.6
Lamar §§	Maximum	82	83	78	76	84	84	85	86	79	72	75	65	50	51	52	64	77	80	79	80	74	78	80	55	53	57	54	64	67	71	76	71.4
	Minimum	49	53	52	58	63	63	65	66	64	55	45	51	41	42	45	47	42	43	49	53	53	60	58	51	49	41	27	27	35	37	40	49.2
Lamonte	Maximum	79	83	78	84	82	79	78	75	76	69	71	61	51	53	59	62	71	77	78	77	79	78	76	72	68	53	52	62	65	68	76	70.6
	Minimum	54	53	49	55	51	64	65	62	61	51	41	49	43	45	47	45	43	40	54	56	58	55	55	52	50	40	22	35	[illegible]	45	57	49.4
Marshall	Maximum	82	80	77	75	77	82	71	74	74	69	71	61	49	54	60	64	72	76	79	75	78	79	....	58	57	52	50	62	63	70	71	68.8a
	Minimum	56	52	57	54	60	62	64	60	60	54	43	48	43	43	46	50	43	43	48	51	56	58	....	51	43	39	24	29	35	35	43	48.3a
Warrensburg	Maximum	84	80	79	77	80	86	71	76	77	70	75	62	49	55	54	61	75	80	81	74	74	79	79	66	58	53	54	64	68	71	76	70.6
	Minimum	53	51	51	56	61	63	64	61	57	57	47	49	44	44	45	49	45	45	54	52	59	57	56	51	48	38	26	35	39	37	45	49.8
Warsaw	Maximum	84	83	78	73	85	86	87	76	76	70	65	63	50	56	54	63	75	83	80	70	78	83	80	70	56	58	52	60	65	78	80	71.5
	Minimum	49	47	53	59	64	65	68	65	61	57	41	50	45	45	47	50	41	38	45	45	60	56	62	50	49	38	24	29	32	50	37	48.5
Northwest Plateau.																																	
Avalon	Maximum	84	80	77	74	78	79	77	76	76	70	70	65	50	54	59	61	74	76	79	78	70	79	80	70	53	48	52	60	63	71	73	69.5
	Minimum	55	54	56	55	60	63	63	60	60	57	45	48	45	46	47	48	44	47	49	52	58	58	55	50	45	40	24	35	28	58	44	49.6
Grant City	Maximum	80	82	74	77	69	80	71	79	75	68	71	63	50	48	53	64	74	75	78	75	66	75	80	68	55	49	50	58	59	60	72	67.8
	Minimum	54	51	55	57	61	62	64	60	60	55	49	45	44	44	45	48	43	46	50	50	57	52	58	58	40	37	23	35	36	33	34	48.6
Kansas City	Maximum	79	78	75	72	72	80	78	75	71	68	70	57	50	52	55	66	72	76	77	72	67	75	78	58	55	49	50	62	65	74	74	67.8
	Minimum	60	59	59	58	62	66	65	61	56	56	55	48	44	44	44	49	49	53	57	58	58	60	58	49	46	34	30	40	40	46	52	52.1
Kidder §§	Maximum	81	80	77	72	70	80	77	78	75	67	71	57	48	50	55	55	71	76	77	75	67	77	78	53	52	45	48	58	61	72	70	66.8
	Minimum	59	57	58	58	62	65	65	61	62	58	48	57	45	46	46	49	45	50	54	56	59	57	58	50	45	41	24	30	48	40	47	51.9
Lexington §§	Maximum	82	81	76	75	74	80	76	75	75	69	72	59	51	54	58	63	73	75	80	75	70	77	80	55	51	52	50	62	65	72	74	68.7
	Minimum	51	53	57	56	62	54	67	63	60	58	45	54	45	45	46	47	45	44	51	50	60	59	56	51	48	43	21	37	38	34	48	50.0
Maryville §§	Maximum	80	79	76	72	67	80	82	77	73	66	70	51	45	47	53	66	72	75	74	73	63	74	75	51	54	44	47	58	59	71	72	66.0
	Minimum	52	52	55	57	56	56	63	59	59	55	42	42	42	42	44	45	44	42	49	49	49	57	55	48	38	38	22	22	35	35	35	46.5
Oregon	Maximum	77	77	75	71	66	78	76	76	73	69	69	67	48	48	52	68	70	74	73	71	65	73	75	60	56	48	47	58	59	70	70	66.4
	Minimum	55	54	58	58	55	61	62	60	64	54	46	45	42	42	48	44	43	48	53	51	55	58	57	47	43	35	23	36	34	40	49	49.0
St. Joseph	Maximum	79	79	76	72	68	82	76	80	71	66	72	56	48	48	52	65	74	78	78	73	64	75	78	52	57	48	51	60	61	73	73	67.4
	Minimum	54	55	59	59	60	65	64	62	58	53	49	47	43	45	45	48	42	49	56	54	59	59	53	49	46	32	25	39	38	40	52	50.3
Tarkio	Maximum	76	75	71	70	73	77	79	76	72	69	66	64	49	51	57	64	65	68	73	70	68	73	72	70	50	48	46	57	56	63	67	65.7
	Minimum	54	[illegible]	57	56	61	64	64	61	61	57	46	49	45	46	47	50	44	46	50	53	58	60	55	49	45	39	20	36	37	35	46	50.1

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
Scale of Shades.
☐ 0 to 2 inches.
▤ 2 to 4 inches.
▨ 4 to 6 inches.
▤ 6 to 8 inches.
▦ Over 8 inches.
HF

Stack

OF THE
ITY OF ILLINOIS
JAN 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

NOVEMBER, 1914

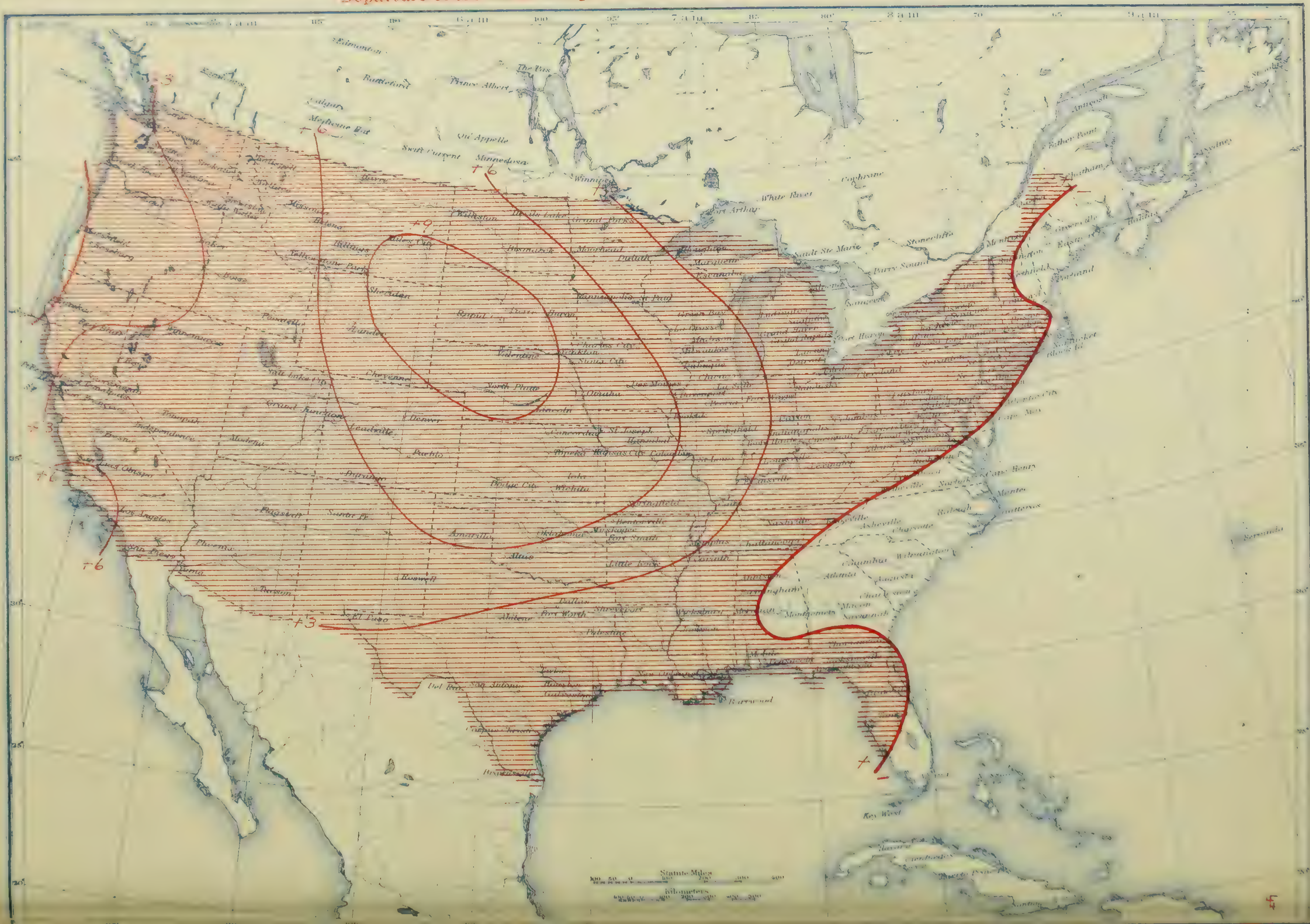
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
DECEMBER 21, 1914.

Departure of the Mean Temperature from the Normal, November, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

Vol. XVIII. Columbia, Mo., November, 1914. No. 11

GENERAL SUMMARY.

The month was among the driest and mildest Novembers on record. It was an unusually fine month for securing the corn crop. Wheat made fair growth, but when the month closed the need of more moisture was beginning to be felt.

During the first week or ten days the weather was almost as mild as early summer; and the variations were slight until about the 16th when a cold wave swept over the State, causing falls in temperature of 20° to 30° or more in 24 hours, and then a more gradual fall during the following two or three days to minima of 10° or lower. By the 22d, however, temperatures again were near or above normal, and the remainder of the month continued pleasant.

Moderately high pressure areas dominated as a rule, consequently the month was comparatively dry, in fact among the driest of its name during the past 45 years or more. Light precipitation occurred during each of the three decades, but it was generally of short duration.

In the extreme southeastern counties, and also in a few of the counties within the lower Osage and Missouri watersheds, the total monthly precipitation exceeded 1 inch; but in the remainder of the State the amounts ranged from but a trace to about three-quarters of an inch, or a little more.

PRESSURE.

The mean atmospheric pressure, reduced to sea-level, was about 0.05 inch above normal. The area of lowest pressure, averaging about 29.68 inches, crossed the State on the 14th-15th; and the highest, averaging about 30.54 inches, followed on the 16th-17th.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 70 stations, was 48.6°. The mean departure from the normal for 52 stations having 10 or more years record was +4°. The highest local monthly mean was 52.8° at Jackson, and the lowest was 42.2° at Unionville. The highest temperature recorded was 89° at Crocker on the 7th; and the lowest was 2° at Bethany, Conception and Unionville on the 19th, and at Maryville on the 20th. The minimum temperature was 32° or lower on an average of 18 days in the Ozark Plateau, and southwest plain; and 11 days in the other three divisions. There was a marked, as well as quite uniform temperature excess in all divisions, ranging from slightly more than 3° in the southeast lowlands to something over 5° in the northwest plateau.

HUMIDITY.

The air was less humid than is generally the case in November. The mean relative humidity averaged from about 6 to 8 per cent below normal. On several days at Columbia the humidity was below 30 per cent.

PRECIPITATION.

The average precipitation for the State, 78 stations reporting, was 0.65 inch. The departure from the normal for 66 stations having 10 or more years record was —1.84 inches. The monthly averages and departures for the five divisions of the State were as follows: Northeast plain 0.69 inch, deficiency 1.55 inches; southeast lowlands 1.10 inches, deficiency 2.69 inches; Ozark plateau 0.83 inch, deficiency 1.84 inches; southwest plain 0.47 inch, deficiency 1.57 inches, and northwest plateau 0.15 inch, deficiency 1.53 inches. The greatest local monthly precipitation was 2.07 inches at Oakfield, while the least, which was but a trace, occurred at Bethany, Conception, Lamonte and Tarkio.

The average number of days with 0.01 inch or more of precipitation was 3.

WIND.

The prevailing winds were from the southwest. There were no unusually high winds during the month; but moderate to fresh gales occurred on two or three dates, especially on the 12th and 16th.

SUNSHINE AND CLOUDINESS.

The month was remarkably bright, nearly clear skies prevailing in periods of from 6 to 10 consecutive days. The sunshine averaged from 12 to 18 per cent above normal. The average number of clear days was 19, partly cloudy 6, and cloudy 5.

MISCELLANEOUS PEHNOMENA.

Fogs- 23rd.
Halos, Lunar- 13th and 27th.
Halos, Solar- 1st, 2d, 23rd, 26th and 28th.
Thunderstorms- 7th, 8th and 9th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement miles.	Average hourly velocity	Miles per hour.	Direction.	Date.
Columbia	30.14	79	......	232	77	5,824	8.1	30	w	18
Hannibal	30.13	76	......	......	......	6,791	9.4	29	w	21
Kansas City	30.12	64	50	262	87	8,514	11.8	40	nw	16
St. Joseph	30.12	73	51	238	79	5,809	8.1	37	nw	18
St. Louis	30.13	69	61	216	72	9,499	13.2	40	sw	18
Springfield	30.14	71	54	199	65	6,725	9.3	29	nw	15
Cairo, Ill	30.15	74	54	......	......	5,600	7.8	37	nw	15
Keokuk, Iowa	30.12	78	66	196	66	5,449	7.6	39	nw	16

COMPARATIVE DATA FOR NOVEMBER.

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	41.6	−2.0	87	15	3.26	+0.94	......	11
1889	39.9	−3.7	73	8	3.43	+1.11	......	7
1890	46.5	+2.9	80	20	2.31	−0.01	......	5
1891	39.6	−4.0	82	− 2	3.60	+1.28	......	5
1892	40.1	−3.5	79	9	2.60	+0.28	......	6
1893	40.9	−2.7	79	− 1	1.59	−0.73	4.86	4
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	4
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	8
1896	42.3	−1.3	82	5	2.18	−0.14	4.00	6
1897	43.4	−0.2	82	− 3	2.40	+0.08	2.39	6
1898	39.9	−3.7	79	− 8	2.28	−0.04	2.75	6
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	7
1900	43.7	+0.1	84	7	2.58	+0.26	4.55	6
1901	43.6	0	84	9	1.38	−0.94	1.90	4
1902	50.1	+6.5	85	18	3.52	+1.20	2.14	9
1903	40.9	−2.7	79	2	1.24	−1.08	2.44	5
1904	46.3	+2.7	83	11	0.22	−2.10	0.68	2
1905	45.8	+2.2	83	2	1.94	−0.38	2.49	6
1906	42.5	−1.1	88	− 3	2.60	+0.28	3.60	8
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	4
1908	47.6	+4.0	87	9	4.14	+1.82	4.00	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	8
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	3
1911	39.1	−4.5	93	− 3	2.55	+0.23	2.15	7
1912	45.9	+2.2	88	12	1.52	−0.80	2.37	3
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	7
1914	48.6	+4.0	89	2	0.65	−1.84	1.90	3

Climatological data for November, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	38	....	.....	....	....	....	....	....	0.35	−2.08	0.29	T.	2	15	4	11	sw.	C. Randecker.
Brunswick	Chariton	652	36	46.3	+4.6	81	6	7	19†	45	0.13	−1.90	0.08	0	2	19	1	10	e.	Louis Benecke.
Columbia	Boone	781	26	48.1	+5.7	80	6	9	19	36	0.32	−1.99	0.30	T.	3	18	5	7	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	46.0	+3.2	79	6	6	19	34	0.17	−1.89	0.15	0.2	2	27	1	2	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	48.4	+3.4	81	2†	10	19	44	1.18	−1.10	1.08	0	3	13	0	17	s.	L. A. Higley.
Glasgow	Howard	618	37	....	.....	....	....	....	....	....	0.06	−1.84	0.04	0	2	22	0	8	w.	J. J. Shaughnessy.
Gorin	Scotland	700	28	....	.....	....	....	....	....	....	0.44	−1.56	0.25	0	4	17	5	8	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	46.2	+5.7	80	6	8	19	37	0.17	−1.78	0.13	T.	4	21	6	3	sw.	U. S. Weather Bureau.
Hermann	Gasconade	483	41	....	.....	....	....	....	....	....	1.77	−1.06	1.68	T.	5	13	5	12	sw.	C. T. Maushund.
Jefferson City	Cole	628	33	48.0	+3.9	80	6	11	20	43	1.11	−1.17	1.05	0	3	21	1	8	s.	Miss Emma Swift.
Keytesville	Chariton	...	1	....	.....	....	....	....	....	....	0.20	......	0.08	0.4	3	....	....	....	.	J. T. Dewey, M. D.
Louisiana	Pike	500	37	47.2	+3.7	79	3†	11	18†	41	0.45	−1.79	0.33	0	4	27	2	1	nw.	J. T. Farrell.
Macon	Macon	881	16	44.2	−0.3	79	6	6	19†	41[a]	0.27	−1.56	0.16	T.	4	20	7	3	sw.	John A. Cook.
Mexico	Audrain	797	37	46.0	+3.2	81	3†	8	20	46	0.56	−1.88	0.36	0.1	5	19	1	10	sw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	49.9	+4.3	82	6	11	19†	33	2.07	−0.66	1.90	0.5	5	12	13	5	s.	E. E. Steines.
Paris (near)‡‡	Monroe	.....	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	......	W. H. Beacom
Palmyra	Marion	652	3	43.8	.....	77	6	7	19	38	0.06	......	0.06	0	1	15	10	5	sw.	W. B. Markell.
St. Catharine	Linn	914	2	45.7	.....	76	6	6	19	31	0.15	......	0.14	T.	2	20	9	1	sw	L. D. Baker.
St. Charles	St. Charles	614	37	48.5	+3.8	81	7	12	19†	37	1.57	−1.28	1.47	0	3	24	1	5	nw.	L. C. Saeger.
St. Louis(1)	St. Louis City	567	44	50.3	+6.9	80	6	13	19	30	1.53	−1.35	1.41	T.	5	21	4	5	sw.	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	49.3	.....	81	6	13	19†	30	1.60	......	1.43	T.	5	19	6	5	w.	St. Louis University.
Steffenville	Lewis	576	22	46.7	+3.2	81	6	7	19	42	0.15	−1.70	0.15	0	1	17	12	1	sw.	Frank Hall.
Unionville	Putnam	1,072	22	43.2	+3.5	78	5	2	20	42	0.22	−1.60	0.12	0	2	18	6	6	s.	Geo. W. Davis.
Vandalia	Audrain	796	4	47.4	.....	76	3	10	19	32	.....	......	....	....	....	23	4	3	nw.	C. B. Ellis.
Warrenton	Warren	865	25	46.2	+3.5	80	6	10	20	45	1.36	−1.33	1.29	T.	5	11	9	10	s.	Prof. J. H. Frick.
Southeast Lowlands.																				
Cardwell	Dunklin	...	4	50.0	.....	83	3	14	20	44	1.66	......	0.80	T.	4	22	3	5	s.	E. M. Perry.
Caruthersville	Pemiscott	...	24	51.4	+2.1	81	2†	13	20	35	1.28	−3.17	0.53	1.0	6	21	2	7	e.	H. E. Averill.
Doniphan	Ripley	440	11	48.0	+0.3	80	6	10	20	43	1.15	−1.92	0.40	T.	5	14	9	7	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	24	52.8	+6.9	83	7	10	20	51	0.89	−2.60	0.72	0.5	5	19	7	4	s.	L. M. Bean.
Marble Hill	Bollinger	420	23	48.7	+3.2	82	3†	10	20	43	0.92	−2.29	0.50	0	3	20	5	5	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	....	.....	....	....	....	....	....	1.02	−3.17	0.56	0.5	7	15	3	12	s.	Miss Josie Smith.
Patton (near)‡‡	Bollinger	.....	....	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	.....	Christian Seabaugh
Poplar Bluff	Butler	333	11	49.5	+2.5	83	3	10	19	53	1.53	−1.95	0.99	T.	6	20	0	10	.....	M. S. Wiseheart.
Sikeston	Scott	328	15	....	.....	....	....	....	....	....	0.81	−3.03	0.36	0.8	4	14	11	5	sw.	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	44	51.1	+4.2	80	7	11	20	33	0.64	−3.38	0.50	0.3	5	19	4	7	s.	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	11	....	.....	....	....	....	....	....	0.93	−1.96	0.75	1.0	3	16	3	11	nw.	G. V. Randolph.
Belle	Maries	1,000	22	51.4	+5.6	82	2†	11	20	43[a]	1.01	−1.50	1.01	T.	1	8	19	3	sw.	A. J. Wofford.
Birchtree	Shannon	1,200	22	49.4	+3.2	81	3	8	20	38	0.90	−1.93	0.42	T.	3	24	2	4	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	27	50.0	+3.2	78	2†	12	19†	34	0.99	−1.75	0.72	0.5	4	21	8	1	sw.	A. C. Fink.
Cassville	Barry	1,500	4	47.4	.....	83	3	10	20	48	0.05	......	0.05	T.	1	22	3	5	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	4	50.6	.....	89	7	10	20	45	1.65	......	1.65	T.	2	25	3	2	s.	Roy W. Reed.
Dean.‡‡	McDonald	1,000	16	52.0[f]	+2.4	82	4†	12	19	49[f]	0.60	−2.39	0.55	0	2	26	1	3	n.	H. E. Dean.
Duncan	Webster	...	2	48.8	.....	80	5	6	20	38	0.71	......	0.38	2.0	6	19	6	5	s.	C. A. Mingus.
Eldon	Miller	934	16	49.0	.....	81	3	9	19†	33	1.43	−0.89	1.09	0.4	3	15	14	1	sw.	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	50.8	.....	81	2†	10	20	37	0.72	......	0.70	0.2	2	22	4	4	w.	R. C. Walton.
Gano ‡‡	Dent	...	12	50.8	+3.8	82	6	7	20	34	0.70	−1.64	0.38	0.7	5	18	7	5	s.	A. C. Leach.
Goodland	Iron	1,000	10	47.3	+1.6	81	2†	5	20	48	0.42	−1.87	0.29	0	3	14	12	4	s.	F. M. Adams.
Hollister	Taney	1,000	5	50.0	.....	82	3†	12	20	50	0.45	......	0.25	0	2	25	0	5	sw.	W. P. Chapmann
Houston	Texas	1,280	23	50.1	+4.2	78	6	7	20	32	0.72	−1.82	0.46	1.0	3	21	5	4	sw.	R. F. Harmon.
Ironton	Iron	925	37	48.0	+4.6	80	3†	9	20	41	1.10	−2.87	0.55	0.5	5	8	14	8	n.	W. H. Delano.
Koshkonong	Oregon	911	15	52.4	+3.1	80	2†	12	20	36	0.75	−2.41	0.30	T.	3	20	4	6	sw.	J. W. Hitt.
Lebanon	Laclede	1,105	27	50.1	+4.1	84	3	8	20	50	1.30	−1.24	1.00	0.5	4	20	8	2	sw.	O. L. Weissgerber.
Lockwood	Dade	1,088	19	50.4	.....	79	2†	14	19	38	0.37	−1.76	0.20	0.2	3	19	5	6	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	16	48.0	+0.9	79	3	8	20	45	1.37	−0.80	1.03	0	3	16	8	6	sw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	51.0	+3.8	82	3	12	20	37	0.30	−2.64	0.30	0	1	20	2	8	sw.	J. R. White & Son.
Neosho	Newton	1,083	32	50.7	+3.8	81	3†	12	20	44	0.31	−2.72	0.25	0	3	20	5	5	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	48.5	+4.6	81	3	8	20	48	1.44	−1.10	1.26	0.5	4	21	7	2	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	50.6	+6.2	76	2	13	19	32	0.71	−1.93	0.58	0.6	4	16	9	5	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	0.90	−1.73	0.60	1.0	2	23	6	1	s.	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	50.8	.....	81	2†	11	19	45	0.55	......	0.30	T.	2	22	2	6	sw.	Darby Fruit Farm.
Appelton City	St. Clair	853	25	47.6	+2.4	80	3†	11	18	52	.....	......	....	T.	....	7	21	2	n.	Mark Brown.
Clinton	Henry	800	28	49.6	.....	83	4	10	19	41	0.48	−1.45	0.48	0	1	19	10	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	46.8	+4.8	80	6	10	19†	43	0.19	−1.78	0.12	T.	2	15	7	8	sw.	A. J. Sharp.
Joplin	Jasper	975	35	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Joplin High School.
Lamar	Barton	964	33	49.6	+3.3	81	6	15	19†	46	0.74	−1.40	0.68	T.	2	20	7	3	s.	E. H. Adams.
Lamonte	Pettis	863	27	46.6	.....	80	1	8	18	38	T.	−1.94	T.	T.	0	17	8	5	sw.	J. Ed. Hall.
Marshall	Saline	779	25	48.0	+5.3	78	2†	8	19	35	0.43	−1.65	0.23	0.1	4	22	7	1	sw.	Prof. W. H. Black.
Nevada	Vernon	860	21	48.8	.....	77	6	15	19	28	0.50	−1.43	0.50	T.	1	17	13	0	sw.	C. Jewell.
Warrensburg	Johnson	883	36	50.0	+5.4	83	3	8	19	35	0.21	−1.54	0.15	T.	3	20	10	0	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	51.0	+3.9	87	7	12	19†	50	1.15	−1.40	0.82	T.	2	23	6	1	nw.	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	.....	30	48.2	+4.5	80	6	5	19	39	0.32	−1.81	0.20	0	3	28	1	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	22	45.2	+1.8	80	6	2	19	42	T.	−1.59	T.	T.	0	22	3	5	sw.	M. H. Moulton.
Conception	Nodaway	982	29	46.2	+5.3	80	6	2	19	37	T.	−1.33	T.	T.	0	11	16	3	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	46.6	+4.3	80	6	3	19	38	0.15	−1.26	0.15	T.	1	25	3	2	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	50.2	+8.7	80	6	9	19	29	0.26	−1.59	0.25	T.	3	22	6	2	sw.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	47.3	+5.9	79	2	9	19	31	0.14	−1.57	0.05	1.0	4	21	6	3	sw.	J. F. Sharp.
Lexington	Lafayette	813	33	48.8	+5.3	81	6	8	19	34	0.29	−1.64	0.21	T.	2	23	0	7	s.	J. W. Keithley.
Liberty	Clay	864	27	49.0[c]	+6.1	83	3	7	19	39[c]	0.17	−1.55	0.17	0	1	16	9	5	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	43.4	+4.4	80	6	2	20	43	0.15	−1.27	0.15	T.	1	25	1	4	s.	J. R. Brink.
Oregon	Holt	1,113	60	47.6	+7.0	79	6	5	19	39	0.06	−1.65	0.06	T.	1	21	5	4	nw.	Tom Curry.
St. Joseph	Buchanan	967	43	48.4	.....	81	2	7	19	34	0.10	−1.73	0.08	0.1	3	21	6	2	sw.	U. S. Weather Bureau
Tarkio	Atchison	.....	3	46.2	.....	79	2†	4	19	41	T.	......	T.	T.	0	23	4	3	sw.	John F. Frazier
Trenton	Grundy	812	20	46.5	+3.1	76	6	5	19	33	0.30	−1.40	0.17	0.2	3	21	4	5	s.	W. H. Estes.
State means and extremes				48.6	+4.0	89	7	2	19†	53	0.65	−1.84	2.04	0.1	3	19	6	5	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F.D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D No. 1; of Paris, Mo., R. F. D. 3.

Daily precipitation for November, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ville ‖	Missouri								.29								.06			T.										T.			0.35
swick‖	Grand								.05							.08																	0.13
bia***	Missouri							.25	.05							.02				T.									T.	T.			0.32
tte	do							.15												.02													0.17
n	do								1.08							.02														.08			1.18
ow ‖	do								.04											.02											T.		0.06
	Mississippi							.03								.25									.13					.03			0.44
ibal***	do							.08	.05							.03			T.						T.					.01			0.17
nann‖	Missouri								1.68					.01			.02			T.										.04	.02		1.77
son City ‖	do								1.05																				T.	.04	.02		1.11
sville	Chariton							.08								.08				.04					T.						T.		0.20
iana	Mississippi			.03												.33								.04						.05			0.45
n	Chariton								T.							.08	.02		T.						T.	.16				T.	.01		0.27
co‖	Mississippi								.36								.08			.01						T.				.08	.03		0.56
eld	Meramec							.63	1.27							.08				.02										.07			2.07
s (near)	Salt																																
yra‖	Mississippi								06																								0.06
at erine	Grand								T.						T.	.01	T.			T.					.14	T.				T.	T.		0.15
arles	Missouri								1.47							.06														.04			1.57
uis (1)***	Mississippi							.67	.74							.04				T.					T.				T.	.07	01		1.53
uis (2)	do							.72	.71							.06				T.					T.				.01	.10	T.		1.60
nville	do								T.																.15	T.				T.	T.		0.15
ville‖	Grand															.12														T.	.10		0.22
iana	Mississippi																																
enton‖	do			T.					1.29								.01			T.						.01				.04	.01		1.36
theast Lowlands.																																	
well	Mississippi								.31							T.				T.								.23	.80	.32			1.66
ersville	do								.33							T.	T.			.10								.12	.53	.18	.02		1.28
an	Black							T.	.40							.05				T.								.10	.30	.30			1.15
on	Mississippi								.12							.02				.01									.72	.02			0.89
Hill	do								.22																				.20	.50			0.92
Madrid‖	do								.02	.15							.02				.20							.03	.04	.56			1.02
n (near)	do																																
ar Bluff	Black								.35								.05		T.	.08							.02	.04	.99				1.53
ton	Mississippi								.18											.06									.21	.36			0.81
o, Ill.**	do								.06							.04				.04							T.	T.	.49	.01			0.64
rk Plateau																																	
gton ‖	Gasconade								.75								.12			.06										T.			0.93
	Meramec								1.01																								1.01
tree	Black								.42											T.									.24	.24			0.90
ar	Osage							.72								.15				.05									.07				0.99
ille	White											T.					T.												.05				0.05
er	Gasconade							.75	.90							T.																	1.65
	Neosho								.05			.55			T.														T.				0.60
an	Osage							.06	.38							.11				.04									.03	.09			0.71
	do							.33	1.09							T.				T									T.	.01			1.43
City	Black																			.02										.70			0.72
	Meramec							T.	.38							.07				.07									.08	.10			0.70
land	Black								.29							.05					.08												0.42
ster	White								.25																					.20			0.45
ton	Gasconade							T.	.46							T.				.10									T.	.16			0.72
on‖	Mississippi								.30								.10			.05										.55	.10		1.10
konong	Black							T.	.23							T.				T.								T.	.30	.22			0.75
non ‖	Osage								1.00								.15			.05											.10		1.30
wood	do							.15	.20							T.				.02													0.37
tain Grove‖	White								1.03																				.12	.22			1.37
t Vernon	Neosho								.30																			T.		T.			0.30
ho	do							T.	.25				T.			.05													.01				0.31
	Meramec								1.26								.06			.05										T.	.07		1.44
gfield ***	White							.14	.44							.07				.06									T.	T.			0.71
tland	Osage							.60												.30													0.90
thwest Plain.																																	
et	Osage							.30	.25											T.													0.55
ton City	do																																
on	do							.48																									0.48
sonville ‖	do								.12							.07				T.										T.			0.19
n	Neosho																																
ar ‖	do								.68							.06				T.										T.			0.74
nte	Missouri								T.							T.			T.											T.			T.
all	do								.23							.04				.01										.15			0.43
da	Osage								.50											T.	T.												0.50
nsburg	Missouri								.15							.03				.03													0.21
aw	Osage							.33	.82											T.													1.15
thwest Plateau.																																	
n	Grand							.05									.07								.20								0.32
any	do			T.				T.												T.										T.			T.
ption	Missouri							T.												T.										T.	T.		T.
t City	Grand															.15				T.										T.	T.		0.15
as City***	Missouri							.24	.01										T.	T.					.01					T.	T.		0.26
er ‖	Grand															.05				.05					.02						.02		0.14
gton	Missouri								21							.08				T.													0.29
ty	do							.17								T.				T.													0.17
ville	do															.15				T.											T.		0.15
on	do							T.							T.				T.											T.	.06		0.06
nsburg	Grand																																
seph***	Missouri							T.							T.	.08			.01						T.				T.	T.	.01		0.10
o	do														T.				T.											T.	T.		T.
on	Grand							T.							.17		T.		.02					.11					T.	T.	T.		0.30

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late e afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

T. Trace, or less than 0.01 inch.

** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight. **Amount included in following observation.

Daily temperatures for November, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	78	80	80	72	76	81	71	53	53	69	68	68	60	65	48	34	34	48	21	38	61	54	56	59	69	68	58	53	52	62	
	Minimum	51	46	45	45	37	37	53	36	29	29	30	40	38	43	43	23	19	19	7	7	16	20	28	[illegible]	35	41	38	32	32	42	
Columbia	Maximum	72	80	78	68	69	80	70	50	59	64	65	68	59	71	58	31	43	47	33	39	59	50	57	61	66	63	53	52	53	61	
	Minimum	48	41	51	44	36	52	43	34	31	38	32	46	43	47	30	22	22	32	9	13	30	25	32	44	46	44	38	34	46	51	
Fayette	Maximum	72	77	77	68	69	79	61	47	58	63	64	65	56	66	57	30	42	46	30	37	59	49	55	59	64	61	57	52	49	60	
	Minimum	49	45	52	50	35	47	42	35	29	40	33	42	38	43	29	20	18	18	6	9	29	27	29	39	39	42	35	[illegible]	44	[illegible]	
Hannibal	Maximum	74	77	77	67	67	80	64	48	56	62	63	67	60	69	61	30	40	46	29	38	56	42	46	59	66	65	52	52	52	59	
	Minimum	46	40	52	41	36	44	44	31	29	40	34	47	40	43	29	23	23	29	8	12	28	26	27	35	32	46	37	33	45	48	
Jefferson City §§	Maximum	75	79	77	72	70	80	77	48	58	63	66	68	58	72	60	38	43	50	26	44	58	52	60	70	65	62	58	52	55	62	
	Minimum	46	44	46	49	38	39	52	38	30	31	35	36	45	45	49	26	22	22	12	11	15	28	29	32	42	43	43	34	35	47	
Macon	Maximum																															
	Minimum																															
Mexico §§	Maximum	74	79	81	71	69	81	69	48	58	65	66	68	68	71	78	32	44	48	21	39	60	50	52	60	67	64	52	51	52	59	
	Minimum	45	40	46	45	33	35	50	37	28	30	31	31	40	39	46	23	20	20	9	8	14	26	26	27	35	35	39	27	30	45	
Oakfield	Maximum	77	80	80	72	69	82	80	59	57	65	63	70	61	72	63	39	43	53	41	38	62	53	47	65	66	64	55	54	54	58	
	Minimum	51	47	57	48	41	49	59	40	30	41	39	45	46	46	27	22	21	28	11	11	31	28	24	38	44	46	43	40	45	45	
St. Catharine	Maximum	72	74	72	65	66	76	69	53	56	62	62	65	60	63	60	35	43	47	36	39	59	49	52	52	60	63	60	50	49	59	
	Minimum	48	43	46	48	35	45	47	35	27	35	32	38	35	44	33	20	18	31	6	10	29	24	27	40	29	42	35	29	40	43	
St. Louis (1)	Maximum	74	75	77	70	66	80	77	49	55	64	62	68	58	70	62	35	39	51	39	36	59	46	44	64	66	65	55	55	54	61	
	Minimum	52	55	60	54	46	50	49	39	37	41	48	49	50	49	35	27	26	32	13	14	34	35	32	39	48	49	43	39	46	52	
Sublett	Maximum																															
	Minimum																															
Unionville §§	Maximum	74	75	73	63	78	66	60	48	56	58	62	64	54	60	40	30	40	38	20	38	54	48	50	64	60	65	54	50	48	58	
	Minimum	46	44	46	44	40	42	40	33	26	32	35	38	35	38	37	20	17	21	4	2	12	26	23	32	40	38	35	23	36	40	
Warrenton §§	Maximum	72	79	78	68	67	80	78	45	57	62	63	67	57	70	55	30	41	39	18	37	57	47	48	61	64	62	52	50	54	60	
	Minimum	42	48	51	50	39	40	52	38	30	30	40	41	42	43	49	24	22	22	11	10	12	28	27	27	41	44	40	32	33	47	
Southeast Lowlands.																																
Cardwell	Maximum	....	82	83	82	78	76	74	71	70	70	70	70	70	75	78	70	43	50	44	36	46	60	64	....	....	70	55	55	60	58	
	Minimum	....	38	45	45	44	42	40	35	31	32	33	34	35	44	36	32	19	20	24	14	22	30	23	....	28	34	45	48	50	53	
Caruthersville	Maximum	76	81	81	81	74	81	81	67	60	68	70	69	71	75	75	52	46	53	42	36	57	61	60	67	68	58	55	53	59	58	
	Minimum	42	48	50	50	49	45	51	46	36	38	41	42	46	51	52	32	23	25	22	13	22	27	31	36	34	34	35	48	50	34	
Doniphan	Maximum	74	77	79	78	70	80	79	66	57	66	65	66	67	72	73	45	42	50	44	35	63	57	56	61	59	53	57	54	56	57	
	Minimum	36	42	45	45	39	38	45	43	30	34	36	32	38	42	43	29	17	25	19	10	20	23	24	25	28	29	44	46	46	50	
Jackson	Maximum	75	81	82	78	72	80	83	75	70	77	72	75	73	80	70	75	71	69	69	60	65	60	52	63	61	58	58	52	57	59	
	Minimum	42	45	54	50	42	44	54	40	30	37	36	39	46	44	40	27	20	24	20	10	22	25	25	23	39	38	46	22	47	53	
Marble Hill	Maximum	76	66	82	78	71	82	80	71	60	70	58	68	71	74	70	41	44	50	43	34	64	55	50	65	64	56	58	49	55	58	
	Minimum	42	42	50	50	40	39	59	43	30	37	34	33	44	42	41	29	19	25	19	10	20	25	23	25	30	31	35	44	45	54	
Ozark Plateau.																																
Birchtree	Maximum	77	80	81	80	72	80	77	62	59	70	65	65	66	70	67	41	42	53	44	37	62	53	59	64	66	57	55	57	54	55	
	Minimum	41	45	48	51	41	45	52	41	28	35	41	37	45	46	39	26	15	27	16	8	24	29	32	30	36	38	38	44	47	48	
Cassville	Maximum	79	79	83	79	81	79	74	64	74	73	64	60	60	60	50	50	50	45	50	49	64	59	60	65	67	67	58	51	55	69	
	Minimum	31	41	40	43	36	36	43	23	31	30	30	44	37	25	15	23	24	30	18	10	20	30	20	25	25	29	43	41	48	38	
Duncan	Maximum	74	74	77	78	80	78	74	60	62	69	65	....	61	54	66	46	38	50	43	40	58	58	53	62	61	58	62	58	51	58	
	Minimum	43	47	54	50	42	44	51	38	27	32	35	....	51	48	40	23	17	24	13	6	30	28	27	37	37	37	42	40	47	48	
Eldon	Maximum	72	79	81	72	71	80	78	56	60	67	67	70	63	71	60	35	46	50	39	40	59	54	59	63	66	59	56	51	53	63	
	Minimum	49	48	52	47	38	49	54	35	29	41	35	42	41	43	32	20	19	28	9	9	33	29	30	41	41	44	41	23	45	48	
Fruit City	Maximum	78	81	81	77	70	81	78	55	54	65	58	62	64	66	65	44	45	53	46	35	61	52	55	63	65	56	55	52	53	55	
	Minimum	56	63	64	61	46	66	41	34	30	36	36	46	49	51	44	19	29	29	17	10	29	31	32	37	44	43	42	40	48	50	
Gano	Maximum	77	80	79	72	72	82	80	65	65	69	68	68	67	72	67	39	42	51	44	38	58	55	54	64	65	63	53	55	53	58	
	Minimum	47	60	55	56	42	52	59	38	31	40	34	44	50	49	38	24	18	28	12	7	30	31	31	40	42	44	43	39	46	47	
Hollister	Maximum	80	80	82	80	78	82	68	54	24	66	68	70	68	72	58	42	46	54	32	48	68	66	64	68	68	60	62	50	54	66	
	Minimum	44	42	44	46	38	40	46	44	30	30	36	34	38	42	48	30	20	26	24	12	18	32	34	32	34	36	44	46	48	44	
Ironton §§	Maximum	78	79	80	75	71	80	76	51	58	68	66	68	68	73	69	38	43	53	23	35	62	54	53	63	66	62	54	51	55	58	
	Minimum	41	40	51	46	34	39	50	42	25	36	28	52	48	40	48	26	17	22	18	9	24	20	20	28	31	37	42	39	47	49	
Lebanon	Maximum	81	80	84	76	79	80	77	51	62	70	74	67	70	70	55	38	47	54	24	41	64	61	58	67	65	60	55	52	60	58	
	Minimum	51	57	52	49	53	46	42	38	30	38	41	45	48	46	53	24	20	21	12	8	14	28	22	38	40	44	40	36	40	40	
Mountain Grove	Maximum	76	77	79	76	70	78	73	50	58	69	65	61	68	70	60	36	28	51	21	39	60	60	53	61	63	54	51	52	52	54	
	Minimum	47	52	53	53	46	50	52	39	28	38	40	40	42	48	52	24	18	17	14	8	18	15	32	33	41	42	42	40	47	48	
Neosho	Maximum	79	80	81	77	81	81	76	71	64	72	72	63	61	71	66	48	45	54	48	48	65	68	68	67	64	60	57	54	57	69	
	Minimum	46	50	43	45	40	50	49	40	28	41	34	37	46	40	44	22	18	26	19	12	27	24	32	26	34	36	37	28	48	41	
Rolla	Maximum	76	80	81	71	71	72	79	62	59	67	67	68	70	72	59	32	43	51	12	39	59	53	57	64	64	65	54	54	54	59	
	Minimum	49	42	47	50	50	39	52	39	29	42	35	35	45	45	45	29	18	19	12	8	11	30	30	32	42	42	44	40	45	49	
Springfield	Maximum	74	76	76	71	72	76	72	55	58	66	65	64	57	68	57	33	39	49	37	45	59	59	57	64	64	60	53	53	52	61	
	Minimum	51	57	56	55	49	....	55	36	33	44	44	46	50	48	33	24	22	32	15	13	36	36	41	43	44	46	44	42	48	48	
Southwest Plain.																																
Amoret	Maximum	78	81	81	75	78	81	73	77	62	67	69	65	65	59	70	44	43	50	45	49	63	65	66	66	68	62	57	52	56	62	
	Minimum	48	49	50	47	39	50	50	32	31	39	33	42	40	44	45	24	19	30	11	13	32	27	40	39	40	39	40	32	44	40	
Clinton	Maximum	77	72	80	83	75	82	78	55	63	72	72	71	59	69	60	41	41	40	40	42	64	58	63	65	66	65	62	59	57	65	
	Minimum	42	46	46	52	37	50	53	35	32	40	31	40	26	43	38	24	20	24	10	14	36	24	36	38	32	42	40	32	45	45	
Harrisonville §§	Maximum	73	79	77	69	70	80	66	48	61	64	66	65	60	67	47	33	42	52	23	45	60	53	62	64	67	63	53	50	52	62	
	Minimum	45	48	49	49	36	44	52	34	28	32	32	40	39	40	43	26	18	18	10	10	17	26	29	37	40	42	40	32	32	45	
Lamar §§	Maximum	77	79	80	75	80	81	78	50	61	69	69	64	67	69	51	37	41	34	26	46	64	64	67	67	65	58	58	52	56	67	
	Minimum	55	53	52	50	46	46	55	38	32	34	38	43	43	47	44	25	21	22	15	15	18	28	28	40	40	40	38	35	40	47	
Lamonte	Maximum	80	79	75	73	70	68	66	58	59	68	65	67	67	58	49	39	44	35	41	60	54	58	56	64	64	65	62	67	66	65	
	Minimum	48	42	40	35	33	30	29	22	28	35	37	32	29	30	25	20	18	8	10	28	22	32	35	40	28	35	37	38	46	50	
Marshall	Maximum	73	78	78	70	69	78	73	57	....	65	65	68	60	68	58	39	37	48	43	40	60	54	60	60	66	62	54	52	53	63	
	Minimum	48	45	45	43	36	47	52	34	....	38	35	40	38	42	38	21	16	29	8	10	26	28	29	41	39	42	39	30	45	47	
Warrensburg	Maximum	78	81	83	71	75	81	69	56	62	65	70	68	64	67	60	34	45	51	43	42	60	52	63	63	68	61	54	52	56	67	
	Minimum	50	52	52	48	40	53	55	35	33	42	37	45	40	47	30	20	22	30	8	12	34	29	32	41	42	43	37	39	44	52	
Warsaw	Maximum	82	84	82	76	72	85	87	62	64	71	72	68	78	76	65	40	44	63	48	42	75	68	63	68	67	63	60	60	56	76	
	Minimum	50	42	47	42	33	47	53	38	28	36	30	38	40	42	40	26	19	25	12	12	25	23	34	36	35	38	34	32	38	45	
Northwest Plateau.																																
Avalon	Maximum	79	78	79	73	69	80	75	59	59	64	66	66	60	64	64	40	43	46	44	42	59	55	55	60	64	66	60	50	49	63	
	Minimum	50	45	50	46	40	43	46	34	29	37	35	40	34	40	40	20	19	30	5	10	34	30	27	42	37	43	35	27	44	47	
Grant City	Maximum	75	78	71	76	68	80	69	57	60	60	64	70	60	60	59	37	41	43	36	44	54	48	54	63	68	68	61	45	47	56	
	Minimum	47	46	48	44	37	42	42	30	28	37	33	38	32	42	32	16	19	27	3	9	37	29	40	43	34	43	32	27	38	45	
Kansas City	Maximum	76	79	78	70	70	80	64	50	62	63	67	63	59	67	60	33	42	48	29	46	59	51	63	63	68	66	52	49	51	60	
	Minimum	53	55	55	54	47	59	43	35	37	45	45	49	42	49	32	23	27	29	9	17	42	23	36	48	48	48	36	32	45	50	
[illegible]	Maximum	75	79	76	66	67	65	68	46	59	62	61	64	55	65	42	30	43	45	18	43	57	49	58	65	60	65	59	59	48	59	
	Minimum	52	50	51	46	42	48	56	45	35	39	40	41	38	45	40	18	21	28	8	12	35	32	29	46	40	47	35	28	44	47	
[illegible]	Maximum	76	80	80	71	71	81	65	50	62	65	67	65	59	67	47	32	45	50	21	43	60	53	61	63	69	67	53	50	52	63	
	Minimum	50	48	52	48	40*	48	54	36	31	44	33	42	39	45	43	23	20	29	8	13	35	30	30	46	41	48	38	30	45	50	
[illegible]	Maximum	72	78	76	65	69	80	56	47	62	61	65	70	54	66	40	30	44	44	18	45	56	56	61	62	68	68	50	47	49	55	
	Minimum	49	46	43	43	40	39	39	28	28	33	32	32	30	30	37	16	16	20	3	2	15	28	27	27	36	37	32	26	26	35	
Oregon	Maximum	72	78	74	64	66	79	69	50	60	60	65	69	61	62	55	30	44	45	38	50	56	49	61	62	66	66	71	50	54	63	
	Minimum	47	51	45	45	41	48	43	30	33	41	36	47	35	48	28	18	20	28	5	12	34	30	29	45	37	45	32	27	38	46	
St. Joseph	Maximum	77	81	79	66	71	81	65	49	63	63	67	68	58	65	51	31	43	47	25	50	58	51	63	67	67	68	52	50	50	57	
	Minimum	52	58	48	45	42	50	41	33	37	39	33	49	39	50	30	19	23	25	7	16	36	32	31	46	39	49	36	30	45	49	
Trenton	Maximum	69	74	74	72	63	76	70	54	56	57	59	65	60	64	61	36	41	43	38	40	53	48	50	58	62	64	59	48	52	58	
	Minimum	51	46	48	46	38	45	45	33	32	40	32	41	36	41	36	20	21	32	5	12	34	29	29	42	34	44	34	30	42	46	

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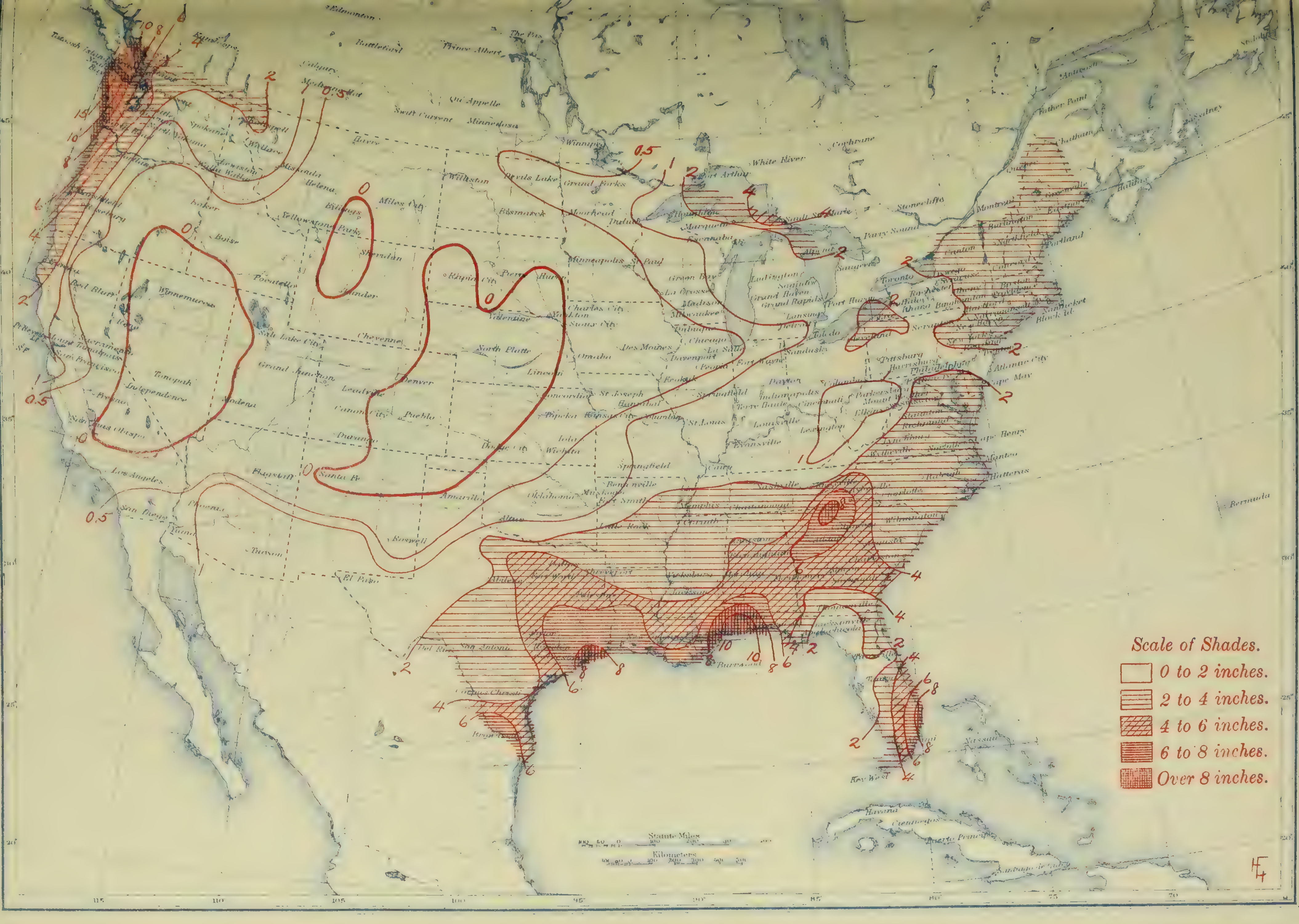
*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers
HF 4

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OF THE
SITY OF ILLINOIS
9 JAN 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

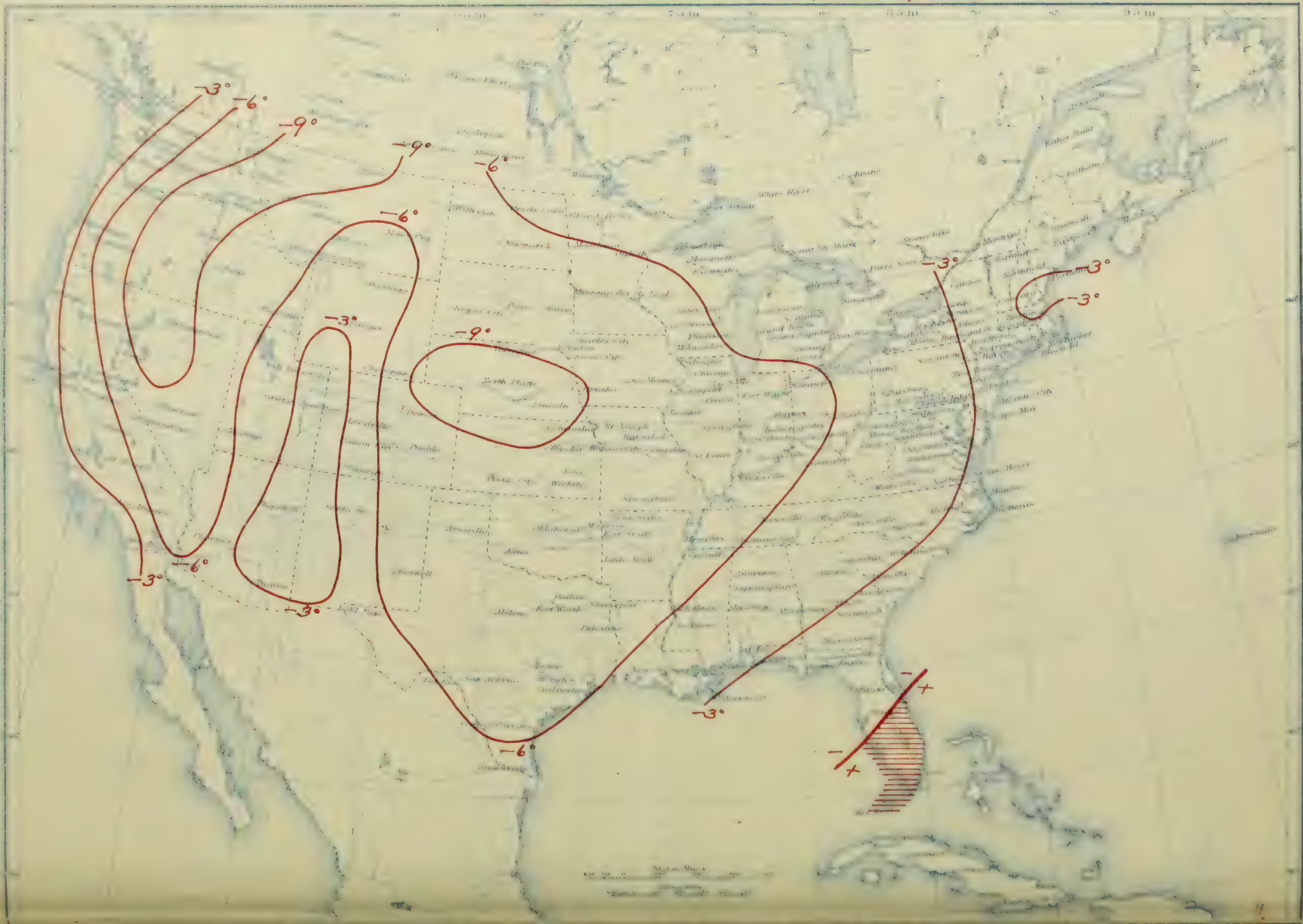
DECEMBER, 1914

BY
GEORGE REEDER
SECTION DIRECTOR

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JANUARY 23, 1915.

Departure of the Mean Temperature from the Normal, December, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

Vol. XVIII. Columbia, Mo., December, 1914. No. 12

GENERAL SUMMARY.

The month as a whole was cloudy, wet and cold. There was sufficient moisture for needs; snow to an appreciable depth covered the ground during most of the last three weeks. Plentiful supplies of ice of fine quality were harvested in rural districts.

After the first week, which was comparatively mild, uniformly low temperatures prevailed, resulting in the second lowest monthly mean in about 27 years. The minimum, 18° below zero, though, was not so low as in December of other years. There were three cold waves, one occurring in the second, and two in the last decade; all three gave zero temperatures quite generally.

The precipitation of the month, a considerable part of which was snow, did not differ much from the average. It occurred almost daily in some part of the State, save the northwest where it was less frequent than in other divisions. While snow was frequent during the latter half of the month, it was not unusually heavy, and did not interfere with traffic to any great xtent.

PRESSURE.

Barometric conditions were rather unsettled, highs and lows following each other in a rather rapid manner. The most pronounced high, with an average pressure of 30.67 inches, crossed the State on the 16th; while the lowest, with an average of 29.58 inches, passed on the 29th.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 71 stations, was 26.8°. The mean departure from the normal for 54 stations having 10 or more years record was −7.1°, which is the second largest deficiency in 27 years. The highest local monthly mean was 35.6° at Caruthersville, and the lowest was 16.4° at Unionville. The highest temperature recorded was 58° at Doniphan on the 2d; and the lowest was 18° below zero at Steffenville on the 26th. The minimum temperature was 32 or lower on an average of 24 days in the northeast plain; 21 in the southeast lowlands; 23 in the Ozark plateau; 24 in the southwest plain, and 27 in the northwest plateau. They were zero or lower on an average of 3 days. The departures from normal were noticeable in all divisions, the deficiency averaging a little more than 5 in the southeast lowlands, where it was the least, to over 8 in the northwest plateau, where it was the greatest.

HUMIDITY.

The air as a rule was more humid than is generally the case even in December. At Columbia the relative humidity was not below 50 per cent at any time; and during the early morning hours it was 90 per cent or more on 15 days. The mean for the State was 8 to 10 per cent above normal.

PRECIPITATION.

The average precipitation for the State, 80 stations reporting, was 2.48 inches. The departure from the normal for 66 stations having 10 or more years record was plus .31 inch. The monthly averages and departures for the five divisions of the State were as follows: noitheast plain, 2.04 inches, excess 0.12 inch; southeast lowlands 4.54 inches, excess 1.07 inches; Ozark plateau, 2.89 inches, excess 0.60 inch; southwest plain, 1.66 inches, deficiency 0.16 inch, and northwest plateau, 1.29 inches, deficiency 0.07 inch. The greatest local monthly precipitation was 5.84 inches at New Madrid, and the least was 0.57 inch at Tarkio.

The average depth of snow was 6.6 inches; the least snowfall, averaging about 3 inches, was in the Ozark Plateau, while the greatest, averaging 10 inches occurred in the Northwest Plateau. The greatest monthly fall was 13.8 inches at Oregon, Holt County.

The number of days with 0.01 inch or more precipitation was 9.

WIND.

The prevailing winds were from the north. Moderate to fresh gales occurred on one or more dates, but there were no damaging or unusually high winds.

SUNSHINE AND CLOUDINESS.

The month was unusually cloudy. The percentage of sunshine for the State was about 25 below normal. At Columbia there was less sunshine than during any December, except 1906, in the past 26 years. The average number of clear days was 9, partly cloudy 5, and cloudy 19.

MISCELLANEOUS PHENOMENA.

Fogs—5th, 6th, 7th, 8th, 19th, 23rd and 24th.
Halos, lunar—1st, 12th, 22d, 26th, 27th and 31st.
Halos, solar—10th, 15th, 16th and 28th.
Sleet—11th, 19th, 20th, 21st, 23rd, 24th and 29th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	30.22	88	......	86	29	5,713	7.7	30	w	29
Hannibal	30.23	85	......	......	......	6,122	8.2	26	nw	29
Kansas City	30.23	72	76	112	38	8,049	10.8	36	nw	29
St. Joseph	30.24	83	79	87	30	5,286	7.1	31	nw	29
St. Louis	30.20	84	77	70	24	8,619	11.6	37	nw	29
Springfield	30.20	90	83	74	23	7,182	9.7	28	w	29
Cairo, Ill	30.19	87	79	......	......	6,232	8.4	33	n	25
Keokuk, Iowa	30.24	83	82	104	32	5,797	7.8	30	nw	29

COMPARATIVE DATA FOR DECEMBER.

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	35.9	+1.7	70	0	2.29	+0.24	......	6
1889	46.8	+12.6	78	2	0.96	−1.09	......	5
1890	36.0	+1.8	76	−3	1.03	−1.02	......	3
1891	39.8	+5.6	72	−1	1.90	−0.15	......	6
1892	29.4	−4.8	75	−22	2.38	+0.33	3.08	6
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	5
1894	36.7	+2.5	75	−7	2.13	+0.08	3.01	5
1895	34.3	+0.1	69	−8	6.13	+4.08	6.95	8
1896	38.6	+4.4	79	−5	0.93	−1.12	2.25	3
1897	29.3	−4.9	74	−14	2.80	+0.75	2.70	7
1898	28.7	−5.5	74	−20	1.69	−0.36	2.50	5
1899	30.4	−3.8	72	−13	2.11	+0.06	1.70	9
1900	35.6	+1.4	68	−3	0.69	−1.36	1.08	4
1901	28.5	−5.7	71	−29	2.93	+0.88	4.43	8
1902	30.7	−3.5	68	−7	2.91	+0.86	2.50	8
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	5
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	5
1905	33.3	−0.9	66	−2	1.45	−0.60	2.24	4
1906	36.1	+1.9	73	0	2.27	+0.22	2.85	8
1907	37.7	+3.5	76	3	1.84	−0.21	1.78	7
1908	38.4	+4.2	80	−4	0.85	−1.20	1.35	3
1909	24.9	−9.3	76	−17	2.86	+0.81	2.50	8
1910	31.2	−3.0	67	−5	1.25	−0.80	2.85	4
1911	36.7	+2.5	74	−11	2.80	+0.75	2.00	7
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	3
1913	38.3	+4.9	74	−3	2.27	+0.19	2.25	7
1914	26.8	−7.1	68	−18	2.48	+0.31	2.30	9

Climatological data for December, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	38	....	.....	....	....	....	....	....	1.99	−0.07	0.85	5.9	12	6	3	22	nw	C. Randecker.
Brunswick	Chariton	652	36	22.6	−9.4	47	1†	−10	26	42	2.09	+0.37	0.68	11.5	9	9	3	19	e	Louis Benecke.
Columbia	Boone	784	26	25.4	−7.5	55	1	−6	26	31	1.86	−0.15	0.63	5.8	12	4	5	22	n	U. S. Weather Bureau.
Fayette	Howard	725	32	21.6	−10.7	51	1	−11	26	31	1.20	−0.59	0.45	9.2	8	7	4	20	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	26.8	−6.4	59	1	−6	26	32	2.33	+0.68	0.77	7.2	14	12	0	19	n	L. A. Higley.
Glasgow	Howard	618	37	....	.....	....	....	....	....	....	1.36	−0.53	0.48	10.0	7	9	6	22	e	J. J. Shaughnessy.
Gorin	Scotland	700	28	....	.....	....	....	....	....	....	1.71	−0.31	0.71	15.4	9	6	5	20	ne	J. W. Pulliam.
Hannibal	Marion	534	23	23.9	−7.4	58	1	−8	26	30	1.72	+0.07	0.55	10.6	14	7	5	19	nw	U. S. Weather Bureau.
Hermann	Gasconade	483	41	....	.....	....	....	....	....	....	2.50	+0.68	0.74	4.0	15	5	2	24	n	C. T. Maushund.
Jefferson City	Cole	628	33	28.5	−4.7	60	1	−3	14†	44	2.84	+0.93	0.80	9.2	11	8	0	23	n	Miss Emma Swift.
Keytesville	Chariton	...	1	....	.....	....	....	....	....	....	2.14	......	1.00	9.6	10	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	37	25.6	−5.5	59	1	−14	26	34	1.89	−0.03	0.60	9.0	11	9	9	13	n	J. T. Farrell.
Macon	Macon	881	16	21.8	−8.2	53	1	−14	26	46	1.79	+0.29	0.75	10.5	9	8	5	18	n	John A. Cook.
Mexico	Audrain	797	37	24.4	−7.8	58	1	−9	26†	43	2.41	+0.31	0.62	10.9	15	8	0	23	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	23	28.0	−6.8	58	1	−1	14†	26	2.26	+0.16	0.65	5.0	13	3	4	24	n	E. E. Steines.
Paris (near)‡‡	Monroe	....	....	...	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	W. H. Beacom
Palmyra	Marion	652	3	21.5	.....	57	1	−14	26	44	1.87	......	0.88	8.0	8	6	5	20	nw	W. B. Markell.
St. Catharine	Linn	914	2	22.0	.....	56	1	−12	26	29	1.80	......	0.77	9.7	11	7	12	12	ne	L. D. Baker.
St. Charles	St. Charles	614	37	28.0	−6.8	57	1	−1	15	29	2.03	−0.05	0.58	3.5	9	5	4	22	nw	L. C. Saeger.
St. Louis(1)	St. Louis City	717	44	28.6	−6.9	60	1	2	26	21	2.23	0.00	0.46	2.4	17	4	7	20	nw	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	27.5	.....	57	1	2	14†	19	2.26	......	0.46	3.4	16	6	3	22	n	St. Louis University.
Steffenville	Lewis	576	22	23.0	−7.8	59	1	−18	26	35	1.32	−0.42	0.42	12.0	9	7	10	14	n	Frank Hall.
Unionville	Putnam	1,072	22	16.4	−11.6	48	1	−16	26	43	2.36	+0.73	0.50	12.5	9	10	3	18	n	Geo. W. Davis.
Vandalia	Audrain	796	4	25.8	.....	57	1	−6	26	27	2.04	......	0.80	10.4	8	9	3	19	n	C. B. Ellis.
Warrenton	Warren	865	25	25.0	−7.2	57	1	−5	26	39	2.96	+0.70	0.72	6.5	14	6	3	22	n	Prof. J. H. Frick.
Southeast Lowlands.																				
Cardwell	Dunklin	...	4	34.7	.....	64	1	2	15	28	5.40	......	1.73	4.0	8	6	9	16	n	E. M. Perry.
Caruthersville	Pemiscott	...	24	35.6	−4.3	60	1	5	15	27	4.85	+0.63	1.46	4.5	9	7	1	23	e	H. E. Averill.
Doniphan	Ripley	440	11	31.8	−5.6	68	2	−8	15	30	5.58	+3.03	2.00	6.0	12	6	11	14	ne	W. W. Martin.
Jackson	Cape Girardeau	458	24	32.0	−4.5	63	1	−11	15	30	3.78	+0.50	1.80	6.0	8	7	1	23	n	L. M. Bean.
Marble Hill	Bollinger	420	23	31.4	−4.6	64	1	−10	15	30	4.10	+0.94	1.05	4.0	9	9	8	14	n	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	21	....	.....	....	....	....	....	....	5.84	+1.62	2.30	1.5	14	5	1	25	n	Miss Josie Smith.
Patton (near)‡‡	Bollinger	....	....	....	.....	....	....	....	....	....	2.98	......	0.90	5.0	6	12	0	19	.....	Christian Seabaugh
Poplar Bluff	Butler	333	11	31.0	−6.6	60	1	−6	15	36	4.82	+1.10	2.17	5.3	9	9	1	21	.....	M. S. Wiseheart.
Sikeston	Scott	328	15	32.9	−5.4	....	....	−2	15	22	4.49	+0.65	1.05	5.0	11	8	4	19	n	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	44	32.4	−6.1	60	2	4	15	22	3.51	+0.18	1.08	6.3	14	7	1	23	nw	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	11	....	.....	....	....	....	....	....	2.24	+0.74	0.65	3.0	13	4	0	27	nw	G. V. Randolph.
Belle	Maries	1,000	22	29.7^{b}	−5.0	60	1	1	26	....	1.95	−0.32	1.20	2.0	4	1	12	18	.....	A. J. Wofford.
Birchtree	Shannon	1,200	22	29.6	−6.4	58	1	−8	15	31	3.74	+1.24	1.20	3.5	8	8	2	21	n	V. H. Kirkendall.
Bolivar	Polk	1,020	27	2.89	−7.3	59	1	−4	15	31	4.09	+1.62	1.55	0.2	7	3	7	21	ne	A. C. Fink.
Cassville	Barry	1,500	4	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	4	27.6	.....	50	1	−4	14†	44	1.14	......	....	1.0	3	5	6	20	s	Roy W. Reed.
Dean‡‡	McDonald	1,000	16	31.0	−7.1	61	1	2	14†	36	1.04	−1.09	....	1.0	....	12	0	19	n	H. E. Dean.
Duncan	Webster	...	2	27.2	.....	57	1	−6	15	27	3.09	......	1.10	4.5	17	6	4	21	n	C. A. Mingus.
Eldon	Miller	934	16	25.9	.....	56	1	−7	14	32	2.09	−0.41	0.78	7.1	15	3	12	16	nw	Charles A. Kellogg.
Fruit City	Reynolds	1,150	2	30.4	.....	58	1	1	15	25	3.42	......	1.20	2.0	7	10	7	14	n	R. C. Walton.
Gano ‡‡	Dent	...	12	28.8	−7.5	60	1†	−2	14	30	3.10	+1.35	0.90	1.8	11	5	7	19	nw	A. C. Leach.
Goodland	Iron	1,000	10	29.1	−5.7	59	1	−10	15	35	3.32	+1.14	....	......	....	6	3	22	n	F. M. Adams.
Hollister	Taney	1,000	5	32.5	.....	58	2	0	15	30	2.45	......	0.60	3.2	9	7	0	24	se	W. P. Chapmann
Houston	Texas	1,280	23	29.6	−6.6	59	1	−2	15	27	2.98	+0.86	0.97	1.0	8	7	4	20	n	R. F. Harmon.
Ironton	Iron	925	37	29.5	−4.8	62	1	−13	15	36	3.79	+0.78	1.10	3.5	12	6	3	22	n	W. H. Delano.
Koshkonong	Oregon	911	15	31.5	−6.3	61	1	−2	15	27	4.41	+1.44	1.36	7.0	11	7	2	22	ne	J. W. Hitt.
Lebanon	Laclede	1,105	27	26.2	−9.2	62	1	−5	14	37	3.62	+0.86	1.30	2.0	13	3	2	26	n	O. L. Weissgerber.
Lockwood	Dade	1,088	19	28.8	.....	57	1†	−1	14	25	2.31	+0.37	0.85	4.5	7	6	4	21	nw	C. S. Crow.
Mountain Grove	Wright	1,490	16	27.4	−7.8	56	1	−2	15	30	3.31	+1.14	0.76	0.5	14	5	2	24	ne	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	38	29.6	−7.4	65	1	−2	14†	35	3.78	+1.10	1.02	2.5	8	7	3	21	ne	J. R. White & Son.
Neosho	Newton	1,083	32	31.6	−4.9	62	1	4	15	31	2.85	+0.21	1.09	1.3	13	9	1	21	ne	W. O. Buck.
Rolla	Phelps	1,139	34	26.8	−7.0	60	1	−8	14	33	3.17	+0.78	1.07	2.9	12	3	8	20	n	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	27.4	−8.1	56	1	−2	14	24	2.90	+0.23	1.33	2.3	16	5	5	21	nw	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	1.90	−0.37	1.00	8.0	7	7	2	22	n	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	6	26.7	.....	59	1†	−4	14	32	0.78	......	0.35	4.0	4	3	6	22	ne	Darby Fruit Farm.
Appelton City	St. Clair	853	25	28.5^{c}	−6.0	60	1	....	....	....	1.30	−0.54	.....	7.0	....	5	19	7	nw	Mark Brown.
Clinton	Henry	800	28	27.3	.....	50	1	−5	14	31	1.77	−0.09	0.92	3.0	5	4	6	21	nw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	23.2	−8.0	52	1	−8	14	40	1.28	−0.63	0.36	9.0	11	4	3	24	e	A. J. Sharp.
Joplin	Jasper	975	35	....	.....	....	....	....	....	....	.....	......	....	.....	....	....	....	....	.....	Joplin High School.
Lamar	Barton	964	33	28.0	−7.4	54	1	2	14	30	1.96	−0.06	0.58	1.5	8	7	1	23	n	E. H. Adams.
Lamonte	Pettis	863	27	25.6	.....	60	1	−12	14†	37	2.12	+0.28	0.85	12.0	8	5	6	20	ne	J. Ed. Hall.
Marshall	Saline	779	25	24.0	−7.2	51	1	−8	14†	31	1.79	0.00	0.50	9.5	10	5	5	21	n	Prof. W. H. Black.
Nevada	Vernon	860	21	27.0	.....	51	1	−4	16	26	1.32	−0.70	0.70	5.2	7	7	14	10	nw	C. Jewell.
Warrensburg	Johnson	883	36	25.2	−8.8	58	1	−7	14	32	1.77	−0.09	0.78	8.5	12	5	8	18	ne	Geo. H. Collins.
Warsaw	Benton	883	11	27.8	−8.1	64	1	−9	15	39	2.48	+0.58	0.84	7.5	11	5	7	19	ne	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	....	30	22.6	−8.2	58	1	−11	26	28	2.00	+0.23	....	12.0	7	11	4	16	ne	F. G. Ashbaugh.
Bethany	Harrison	881	22	19.4	−12.6	56	1	−16	26	32	1.16	−0.40	0.40	9.0	6	8	4	19	ne	M. H. Moulton.
Conception	Nodaway	982	29	19.6	−10.2	52	1	−13	26	33	1.17	+0.09	0.50	10.0	8	5	11	15	ne	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	19.3	−9.3	50	1	−12	26	31	1.13	−0.11	0.40	8.0	6	9	3	19	nw	W. H. Campbell.
Kansas City	Jackson	963	27	24.2	−7.3	54	1	−4	14	30	1.52	+0.16	0.37	11.8	12	6	6	19	n	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	23.1	−6.3	51	1	−10	14	39	1.95	+0.48	0.65	13.5	12	10	1	20	nw	J. F. Sharp.
Lexington	Lafayette	813	33	24.0	−7.3	52	1	−7	26	29	1.53	−0.34	0.45	8.5	8	11	0	20	n	J. W. Keithley.
Liberty	Clay	864	27	23.8	−7.8	59	1	−7	16	29	1.02	−0.40	0.36	9.0	4	8	0	23	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	18.3	−8.4	50	1	−10	14†	40	1.34	+0.15	0.40	9.5	9	13	1	17	n	J. R. Brink.
Oregon	Holt	1,113	60	22.6	−6.0	60	1	−12	14	33	1.02	−0.52	0.31	13.8	7	9	6	16	n	Tom Curry.
St. Joseph	Buchanan	967	43	21.6	......	52	1	−8	14	28	1.08	+0.05	0.35	11.2	12	7	6	18	nw	U. S. Weather Bureau
Tarkio	Atchison	......	3	19.0	.....	50	1	−11	14†	28	0.57	......	0.15	6.0	5	14	3	14	ne	John F. Frazier
Trenton	Grundy	812	20	22.0	8.1	55	1	−9	26	25	1.34	−0.23	0.35	7.3	11	7	4	20	ne	W. H. Estes.
State means and extremes				26.8	−7.1	68	2	−18	26	46	2.48	+0.31	2.30	6.6	9	7	5	19	n	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Sublett, Kirksville, R. F. D. Sublett; of Mt. Vernon, Aurora, R. F. D No. 1; of Paris, Mo., R. F. D. 3.

Daily precipitation for December, 1914.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
oonville ‖	Missouri		.04	.11			.04	.10		.09	.05			.08						.34		.19			.06					.85	.04		1.99
runswick ‖	Grand						.03	.12	.06	.15			.20	.13				T.		.51		.21								.68			2.09
olumbia***	Missouri		.18			T.	.11		.04	.11	T.	T.	.03	.07				T.	.28	.04	.31			.06					.41	.22		T.	1.86
ayette	......do						.23			.08		.02	.05	.02				.05		.45	.30												1.20
ulton	......do		.56	.07			.04	.09	.01	.07				.05						.23	.29	.03			.10				.01	.77		.01	2.33
lasgow ‖	......do						T.	.04		.02	T.			.22					T.	.32		.25								.48	T.	.03	1.36
erin	Mississippi	.02				T.	.11	.09	.10	.15			.02						.24		.27									.71			1.71
annibal***	......do		.09			T.	.06	.06	.13	.08	.01	T.	T.	T.				.04	.39	.03	.19			.04	T.		T.		.04	.51		.05	1.72
ermann	Missouri		.32	.74	.04		.01	.09		.05	.02	T.	T.	.06	.01					.12		.32			.02					.66	.02	.02	2.50
fferson City ‖	......do	T.	.60	.32	.04		.05	.08		.18	.05	T.		.12	T.					.10		.50								.80			2.84
eytesville	Chariton	T.					.06	.09	.05	.10			.15					.02	.45		.20	T.							1.00			.02	2.14
ouisiana	Mississippi		.45	.05	T.		.06			.20	.10	T.						.02		.60	.10				.01					.28		.02	1.89
acon	Chariton	T.				T.	.01	.10	.03	.17		T.	T.	.04				T.	.04	.37	T.	.28			T.					.75		T.	1.79
exico	Mississippi		.04	.22		T.	.02	.30	.04	.15	.02	T.	T.	.01	T.			T.	.01	.38		.31			.05					.62	.20	.04	2.41
akfield	Meramec	.01	.65	.13		T.	.15		.05	.03	.04	.02	T.	T.						.05	.51	.09		T.						.52		.01	2.26
aris (near)	Salt																																
almyra	Mississippi						.07	.06	.06	.10			T.					.10	.48	.12										.88			1.87
Catherine	Grand					T.	.02	.12	.06	.30	T.	T.	.03	.02				T.	T.	.32	.14	.01			.01				T.	.77			1.80
Charles	Missouri	T.	.45	.13		.04	.11	.05		.03	T.	T.		T.						T.	.10		.58							.54		T.	2.03
Louis (1)***	Mississippi	T.	.35	.27	.28	.04	.04	.01	.03	.04	.01	T.	.06	.01			T.		.14	.07	.42	T.		.05	T.				.18	.23		T.	2.23
Louis (2)	......do	T.	.44	.28	.23	.05	.06		.01	.05	.02	T.	T.	.06			T.		.13	.08	.36	T.			.02				.01	.45		.01	2.26
effenville	......do					T.	.05	.12	.15	.05	T.	.07	T.	T.	T.			.10	T.	.42	.21									.15			1.32
nionville	Grand						.10	.25	.15	.28	T	T.	T.	.08						.40		.50			T.		T.			.50	.10		2.36
andalia	Mississippi		.80				.19			.10	.22		.10							.55	.10								T.	.18		T.	2.04
arrenton	......do		.46	.70	.01	T.	.01	.06	.03	.09	.05			.12						.16		.50			.01					.72		.04	2.96
Southeast Lowlands.																																	
ardwell	Mississippi			1.73	.61	.15		T.			T.			.45					T.	.68	.10				.32	T.			1.36				5.40
uthersville	......do		T.	1.46	.15	T.	T.	.05		T.	T.			.46					T.	.75	.13	T.	T.		.55	.70			T.	.60			4.85
oniphan	Black	.04	.01	2.00	.82		.10	.01						.55						.67	.05				.90	.22				.21			5.58
ckson	Mississippi			1.80		.10				.03			.20						.70		.45			.20						.30			3.78
arble Hill	......do			.60	1.05	.10				.05				.40					.20	.80								.60		.30			4.10
ew Madrid ‖	......do			.20	2.30		.15	.12			.02			.50						.60	.03	.52			.09	.62	.03			.64	.02		5.84
tton (near)	......do			.55	.01									.50					.90						.63					.39			2.98
plar Bluff	Black		.02	2.17		.10	.11	.09					.53						.60					1.03					.17				4.82
keston	Mississippi		.04	.63	1.01	.03	.10			.01				1.05						.75	.25				.27	.35							4.49
iro, Ill.***	......do		T.	1.02	.06	.03	.05	.01	T.	T.	T.		.18	.34					.07	.67	.26			T.	.31	.02			.11	.38			3.51
Ozark Plateau																																	
rlington ‖	Gasconade		.10	.65	.15		.28	.10		.28	.11	T.		.12						.06	.07	.12			.09					.11	T.		2.24
lle	Meramec	1.20											.20								.10									.45			1.95
chtree	Black		.54	1.20	.10						T.			.11						.75	.40				.34					.30			3.74
livar	Osage	.05		1.55					.11	T.												1.00		.50					.86	.02			4.00
ssville	White																																
ocker	Gasconade			T.					T.		T.	T.	.09								.03	.40							**	**	.62		1.14
an	Neosho	T.	.17						T.		T.		T.	T.							.17	.06			.10					.42			1.04
ncan	Osage	.01	1.10	.33	.01	T.	.04	.06	.05	.06	.02	T.	.02	.02			T.	T.	T.	.03	.60	.08		.02	.25					.39			3.09
don	......do	.01	.78	.03		T.	.10	T.	.01	.07	.03	T.	.12	T.					.02	.05	.40			.01	.01				.03	.42			2.09
uit City	Black			1.20		.15			.12					.20						.75	.40									.60			3.42
ro	Meramec		.90	.44	.04	T.	.14			.13	T.		T.	.04						.46	.28	.12			.25					.30			3.10
olland	Black																																3.32‡
ollister	White	.30	.60	.30	.10								.05	.15							.25					.20				.50			2.45
ouston	Gasconade	T.	.97	.58	T.	T.	T.	T.	T.	.14	.02		T.	.08			T.		T.	T.	.49	T.		T.	.35				T.	.35			2.98
ton ‖	Mississippi		.25	.27	1.10		.10	.10		.06	.04	T.		.30	T.					.50	T.	.42			.45	T.				.20	T.		3.79
shkonong	Black		.40	1.36	.10		.04	T.			T.		.20	.40						.76	.18				.25	.31				.41			4.41
banon ‖	Osage		1.30	.60	.05		.01					.04	.01						.03	.08	.04	.50			.28					.67	.01		3.62
ckwood	......do		.85				T.	T.		T.	T.	T.	.08	.05	T.			T.	.05	.18	.30								.80				2.31
untain Grove ‖	White		.76	.65	.42		.18	.12	.05	T.		.04		.03						.34	.03	.32			.07	.12				.18			3.31
unt Vernon	Neosho	.35	1.02	.40			.13			T.	T.		.20							.01		.81		T.	T.				.35	.51			3.78
osho	......do	.01	1.09	.01			.02	.11	.15	.02	T.	T.	T.	.05				T.		.11	.29	T.		T.	.42				.05	.52			2.85
lla	Meramec		1.07	.19	.16	T.	.08	.09		.06	.04	T.		.08						.15		.48			.34					.43	T.		3.17
ringfield***	White	.88	.59	.11	T.	T	T.	.03	.04	.04	.02	T.	.06	.01			T.		.08	.05	.23	T.		.04	.10	T.			.40	.22			2.90
eatland	Osage							1.00		.30	.10			.10				.10					.10						.20				1.90
Southwest Plain.																																	
oret	Osage					T.	T.	T.		T.	T.		T.	T.				T.	.03	T.	.35			T.	T.	T.			.05	.35			0.78
pleton City	......do									.20		.10									.40									.60			1.30
inton	......do		.25						.10				.20							.30									.92				1.77
rrisonville ‖	......do			T.			.06	.05	.04	.05	.10		.07	.08				.05		.12		.30								.36			1.28
plin	Neosho																																
mar ‖	......do		.55			.02		T.		.07	T.	T.	T.	.08			T.	T.	T.	.02	T.	.40			.24					.58			1.96
monte	Missouri		T.	T.			T.	.10	T.	.10	.12		.25					.15		.35	.20			T.					T.	.85			2.12
rshall	......do					T.	.08	.08	.03	.10		T.	.10	.15				.10	T.	.35	.30				T.				T.	.50		T.	1.79
vada	Osage	T.	.09					T.	T.	T.	T.	T.	.20	T.	T.	T.	.05	T.	.08	.05	.15									.70			1.32
arrensburg	Missouri		T.			T.	.08		.02	.12	T	.01	.24	T.				.05	.04	,13	.25			T.	.03				.02	.78			1.77
rsaw	Osage	T.	.28					T.	.05	.08	T.	T.	.28	.10			T.	T.	T.	.05	.50			.12	.07				.11	.84			2.48
Northwest Plateau.																																	
alon	Grand						.15	.05	.20	.05			.20							.75	.60												2.00
thany	......do					T.	.08	T.	.13	T.	T.		.20					.05	T.	.40	.30			T.					T.	T			1.16
nception	Missouri					.05	.06	T.	.06	.05			.50	T.				.05	.10		.30								T.	T.			1.17
ant City	Grand						.10	.05	.18				.40	T.	T.			T.	T.	.20		.20							T.				1.13
nsas City***	Missouri					.08	.07	T.	.03	.05	T.	.04	.37	T			T.	.03	.33	.04	.28			T.					.16	.04	T.		1.52
dder	Grand							.02	.03	.05	.10	.01	.30	.10				T.	.65	.37		.15								.05	.12		1.95
xington ‖	Missouri						.06	.04		.04				.20					.04	.40		.30								.45			1.53
berty	......do					T.	T.		.08	T.	T.	T.	.33					T.	T.		.36									.25			1.02
ryville ‖	......do						.10	.09	T.	.10	.10	T.	.10	.15						.20		.40							T.	.10			1.34
egon	......do					.01	.09		.08	.10			.28					T.	.31		.15			T.		T.			T.				1.02
ttonsburg ‖	Grand																																
Joseph***	Missouri					.03	.06	.01	.05	.03	.01	T.	.35	T.				.03	.24		.25			T.		T.			.01	.01	T.		1.08
rkio	......do					T.	.09	.09	.09	T.	T.	T.	.15					T.	T.		.15					T.			T.				1.57
enton	Grand					.07	.05	.05	.14	T.	T.	.02	.13					.03	.35		.25			T.					.21	.04			1.34

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours; except as otherwise indicated observations are generally made late the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

T. Trace, or less than 0.01 inch.

‡ Separate dates of fall not recorded.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

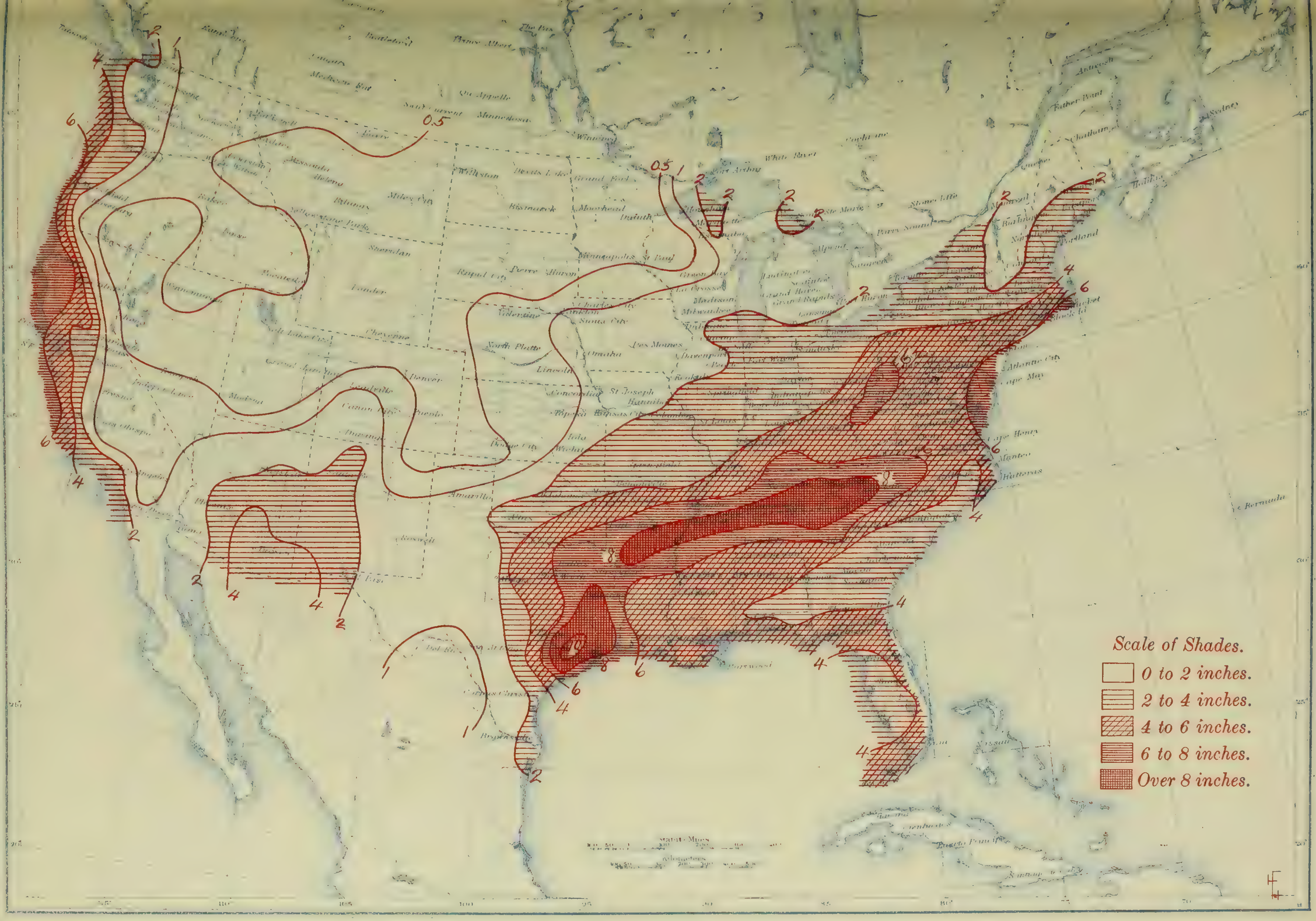
**Amount included in following observation.

Daily temperatures for December, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Northeast Plain.																																	
Brunswick §§	Maximum	47	45	45	47	40	41	45	40	33	26	23	31	17	10	23	14	30	34	29	23	18	21	33	24	17	26	35	39	35	20	35	30.5
	Minimum	45	37	28	28	28	38	37	37	32	20	19	17	11	−5	−6	−4	−4	11	19	6	6	2	4	6	4	10	7	25	33	2	2	16.0
Columbia	Maximum	55	48	42	43	41	41	44	41	34	25	23	33	30	9	23	13	28	36	34	28	20	26	34	33	15	25	36	39	37	18	40	32.1
	Minimum	48	37	34	33	38	39	39	34	24	21	19	19	7	−2	1	1	8	28	12	13	10	9	7	14	1	−6	25	34	12	5	16	19.0
Fayette	Maximum	51	44	42	41	38	38	40	38	30	23	20	28	31	5	20	16	25	32	30	22	17	21	31	30	12	20	32	37	34	15	35	29.0
	Minimum	45	32	30	29	35	37	36	30	20	18	17	16	1	−6	−4	−3	−3	25	8	8	5	4	2	9	3	11	21	30	7	0	16	15.5
Hannibal	Maximum	58	48	43	43	42	42	42	39	33	26	25	33	32	10	20	14	26	35	34	21	20	24	31	34	12	22	31	40	37	15	33	31.1
	Minimum	47	36	31	32	39	38	38	32	23	21	21	20	2	−2	1	−1	6	26	8	8	8	6	6	10	−1	−8	22	24	13	1	11	16.7
Jefferson City §§	Maximum	60	48	40	44	40	50	49	50	42	32	30	43	29	14	25	20	34	43	33	33	28	32	42	45	25	23	43	44	40	32	40	37.2
	Minimum	48	38	36	35	34	38	40	39	32	21	21	20	15	−3	−2	2	4	15	24	16	12	16	14	15	9	−3	−1	28	34	7	8	19.7
Macon	Maximum	53	43	42	43	39	39	41	36	31	28	23	32	15	9	24	13	27	33	27	18	16	28	32	26	14	24	33	39	35	18	35	29.5
	Minimum	47	35	27	27	28	35	36	36	30	19	19	15	14	−5	−5	−4	−4	8	18	9	6	5	5	10	1	−14	−13	22	32	0	−1	14.1
Mexico §§	Maximum	58	39	39	41	40	41	44	39	35	26	25	33	21	14	22	17	28	34	34	25	21	26	35	33	13	25	34	35	35	19	38	31.2
	Minimum	48	36	32	31	35	35	37	35	35	19	19	16	20	−2	−3	0	0	10	32	15	17	8	8	12	5	9	−9	25	31	−4	4	17.6
Oakfield	Maximum	58	54	42	43	42	42	47	42	37	30	26	32	32	15	25	21	25	40	35	29	32	29	32	34	28	23	35	43	39	30	38	34.8
	Minimum	45	40	37	36	38	39	39	37	27	22	20	18	13	−1	−1	6	8	22	19	17	15	15	17	27	9	0	18	28	29	8	12	..
St. Catharine	Maximum	56	47	40	39	38	39	42	40	36	28	24	29	30	15	21	16	21	34	33	21	19	24	31	31	13	16	28	37	35	22	34	30.3
	Minimum	42	35	26	27	33	37	33	34	26	19	18	16	9	−7	−5	−7	−4	19	12	0	0	0	2	11	−1	−12	14	26	21	2	6	13.9
St. Louis (1)	Maximum	60	55	45	41	45	43	46	43	34	30	28	33	33	15	20	19	24	40	36	31	32	28	34	38	18	23	34	43	40	25	35	34.5
	Minimum	49	41	40	35	39	40	41	34	28	25	24	22	13	3	4	10	10	23	20	18	18	18	22	17	6	2	20	29	25	12	15	22.6
Sublett	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...
Unionville §§	Maximum	48	40	38	40	39	40	38	36	31	23	20	26	12	5	16	8	25	28	15	16	6	8	20	21	8	12	28	32	22	12	26	23.8
	Minimum	46	30	24	22	26	34	35	34	30	18	14	15	10	−10	−12	−10	−11	−6	15	0	4	−3	−2	0	−4	−16	−15	8	20	−6	−8	9.1
Warrenton §§	Maximum	57	40	42	40	40	41	46	40	32	25	33	31	25	10	21	14	27	36	25	36	21	26	34	33	15	23	36	38	23	19	46	31.5
	Minimum	46	40	37	35	35	38	38	34	30	20	19	15	22	−2	−2	−1	1	9	25	13	13	11	12	17	7	−5	0	23	30	7	7	18.5
Southeast Lowlands.																																	
Cardwell	Maximum	64	60	57	52	53	54	56	56	47	40	40	40	37	26	28	34	30	38	38	36	36	32	30	36	35	30	45	46	40	....	....	41.4
	Minimum	40	44	46	40	40	38	38	38	34	30	20	22	30	9	2	6	15	22	30	28	30	22	27	28	24	13	25	38	28	20	24	27.5
Caruthersville	Maximum	60	57	55	52	46	47	53	51	47	39	41	41	38	31	27	34	31	38	37	35	38	33	37	38	35	32	46	46	47	37	40	41.6
	Minimum	50	48	47	41	40	44	41	38	39	31	24	25	31	12	5	10	16	27	35	28	29	24	26	33	24	11	19	28	37	28	21	29.5
Doniphan	Maximum	62	68	56	47	46	48	50	....	49	43	39	35	35	22	22	28	29	35	38	36	34	34	35	38	35	27	39	40	43	36	36	39.5
	Minimum	49	48	41	39	38	40	39	....	35	38	25	18	20	1	−8	0	10	23	32	24	24	18	19	29	20	5	9	19	33	18	15	24.0
Jackson	Maximum	63	62	56	53	47	48	50	49	46	45	40	34	32	20	15	24	25	38	35	33	37	33	35	35	38	28	40	45	45	40	35	39.5
	Minimum	46	48	45	38	38	36	43	40	34	27	21	22	19	1	−11	4	5	20	29	22	24	19	20	32	20	9	10	28	35	18	15	24.4
Marble Hill	Maximum	64	60	54	50	45	45	48	48	44	35	30	35	34	20	20	30	25	36	37	31	27	34	36	35	30	29	42	45	42	35	35	38.1
	Minimum	54	49	45	39	39	43	41	40	34	27	20	25	20	4	−10	1	5	22	31	20	15	25	22	25	20	7	15	20	35	18	12	24.6
Ozark Plateau																																	
Birchtree	Maximum	58	55	46	41	41	45	46	45	42	34	35	33	27	16	23	30	25	33	35	35	32	....	34	34	32	26	42	40	38	32	37	36.4
	Minimum	48	46	41	36	36	38	38	35	33	20	16	22	13	−1	−8	8	10	21	28	23	16	....	16	28	19	4	14	26	30	12	14	22.7
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Duncan	Maximum	57	45	45	35	38	41	43	41	39	31	27	28	27	12	21	21	24	32	33	29	30	28	30	31	36	23	35	37	37	39	36	33.1
	Minimum	45	38	35	34	35	37	36	36	31	25	18	19	10	−4	−6	8	6	23	25	23	16	4	18	29	16	4	17	28	32	9	11	21.2
Eldon	Maximum	56	48	42	42	41	43	45	43	39	30	25	32	31	12	28	12	28	36	33	31	31	29	35	33	20	28	37	39	38	22	42	33.9
	Minimum	43	36	33	32	36	38	38	36	26	18	18	17	7	−7	−4	−2	7	19	15	16	10	10	15	16	4	−2	12	29	20	5	13	17.9
Fruit City	Maximum	58	55	46	45	41	44	46	44	34	36	34	32	41	20	25	28	25	34	34	29	33	33	33	33	33	24	39	39	40	34	38	36.1
	Minimum	49	46	41	32	38	41	42	34	23	22	22	22	20	7	1	12	9	24	29	24	20	26	21	31	19	8	14	31	33	12	13	24.7
Gano	Maximum	60	60	40	40	40	43	45	45	49	30	30	32	30	12	24	21	28	36	34	30	32	29	35	33	30	27	48	41	38	29	38	35.5
	Minimum	48	40	37	35	35	38	39	36	30	21	21	18	12	−2	−1	6	10	25	26	20	17	13	17	29	15	4	18	29	29	7	10	22.0
Hollister	Maximum	56	58	42	44	46	48	46	48	40	34	36	36	26	20	24	28	26	38	36	38	36	30	38	37	37	28	40	42	40	32	48	38.0
	Minimum	48	52	50	40	40	38	38	36	38	22	12	36	20	4	0	14	18	22	36	34	20	22	26	34	28	4	10	32	32	12	20	27.0
Ironton §§	Maximum	62	52	44	40	42	45	46	42	36	28	33	34	31	16	23	25	29	36	34	33	27	32	36	34	25	27	43	45	41	28	38	35.7
	Minimum	42	49	40	38	37	40	40	38	33	24	22	17	28	0	−13	5	2	23	32	20	20	15	18	30	17	5	17	24	36	12	11	23.3
Lebanon	Maximum	62	44	38	39	41	42	45	41	35	24	32	15	15	17	29	25	27	34	31	32	28	30	34	30	26	27	28	40	37	31	43	33.3
	Minimum	44	43	36	35	34	38	36	38	32	20	20	15	11	−5	−3	1	0	13	23	17	15	13	16	17	10	1	2	23	35	9	6	19.2
Mountain Grove	Maximum	56	49	40	37	38	42	48	41	36	26	34	31	18	21	26	24	28	34	34	32	26	28	33	31	21	26	36	38	33	28	40	33.4
	Minimum	47	47	37	35	34	35	35	36	33	20	18	19	18	−1	−2	0	7	11	26	24	17	16	18	19	18	6	11	25	32	9	10	21.3
Neosho	Maximum	62	52	43	47	42	46	45	43	41	35	33	37	33	19	35	31	33	38	37	33	34	35	35	36	31	35	45	44	41	31	46	38.0
	Minimum	51	39	36	37	29	38	38	36	34	20	20	25	8	5	4	10	13	27	28	27	15	19	24	30	20	11	26	29	27	13	21	21.5
Rolla	Maximum	60	45	40	37	40	43	47	40	34	24	28	33	19	11	23	20	28	37	30	32	24	28	35	33	24	27	38	40	37	25	41	33.0
	Minimum	45	44	37	36	35	35	39	36	31	21	20	18	18	−8	−3	−1	5	13	27	20	17	16	18	19	15	4	5	27	34	7	8	20.6
Springfield	Maximum	56	46	38	38	38	40	41	40	36	27	28	32	29	10	25	19	25	33	32	33	30	30	31	33	24	26	39	40	36	27	41	33.0
	Minimum	46	37	36	36	35	37	35	36	27	17	20	26	8	−2	1	6	13	23	24	24	14	18	20	23	10	7	21	32	15	9	23	21.8
Southwest Plain																																	
Amoret	Maximum	59	59	48	49	44	44	46	45	42	33	28	32	32	12	29	20	29	35	35	28	30	30	32	34	21	29	37	39	36	24	42	35.6
	Minimum	38	37	29	34	33	36	39	36	29	19	13	17	3	−4	−2	−3	8	25	20	16	4	6	9	18	7	−3	15	31	20	5	16	17.8
Clinton	Maximum	50	49	43	47	47	44	45	43	41	41	25	32	31	15	30	20	28	35	34	32	30	29	34	33	20	29	38	37	35	30	40	35.1
	Minimum	38	37	32	32	30	38	40	30	20	20	21	18	10	−5	5	0	15	25	20	15	8	10	10	18	9	−2	22	29	28	6	14	19.5
Harrisonville §§	Maximum	52	46	45	45	40	43	42	40	35	25	26	32	16	8	20	12	30	35	25	27	18	26	32	29	15	28	37	38	32	22	30	30.7
	Minimum	48	38	28	29	30	35	38	34	30	21	20	18	6	−8	−7	−6	−4	12	24	20	5	3	6	6	5	−4	−3	26	30	4	3	15.7
Lamar §§	Maximum	54	44	43	43	39	42	45	42	36	24	31	35	17	15	33	21	30	36	30	31	26	32	33	33	31	32	40	41	31	28	45	34.3
	Minimum	48	38	35	35	31	36	37	37	33	20	19	20	7	2	4	6	12	21	26	23	12	12	21	22	15	8	10	30	31	11	11	21.7
Lamonte	Maximum	60	59	56	47	43	42	43	44	44	38	27	31	32	13	23	16	27	36	33	27	29	32	33	33	32	30	25	39	34	36	38	35.5
	Minimum	41	43	36	29	30	35	38	40	37	24	19	16	9	−12	−10	−7	5	27	12	4	12	7	5	14	3	−2	−12	14	11	12	3	15.7
Marshall	Maximum	51	48	43	43	42	42	43	41	37	28	24	31	30	13	22	13	25	34	32	24	23	24	33	31	15	23	34	39	35	20	36	31.6
	Minimum	41	37	....	29	35	38	38	36	28	19	19	16	10	−8	−5	−6	3	25	17	11	4	4	7	15	5	−8	18	27	20	2	11	16.3
Warrensburg	Maximum	58	48	41	44	39	42	43	41	37	29	25	33	32	10	18	15	27	35	33	18	20	26	33	33	15	26	42	39	36	21	39	32.2
	Minimum	46	37	29	31	34	37	39	37	28	19	20	17	8	−7	−2	−4	5	27	12	13	7	10	10	14	5	−6	25	34	19	4	15	18.2
Warsaw	Maximum	64	50	54	42	42	40	46	43	40	32	27	32	32	13	30	25	30	35	34	30	30	30	35	35	22	28	37	42	37	23	46	35.7
	Minimum	50	39	35	34	34	36	38	36	32	20	20	17	12	−7	−9	−6	5	27	22	19	11	6	10	22	10	3	25	32	23	7	18	20.0
Northwest Plateau.																																	
Avalon	Maximum	58	46	43	43	39	39	41	40	36	26	24	30	28	12	22	18	22	33	31	22	18	24	32	27	16	15	30	37	35	20	36	30.4
	Minimum	45	35	24	26	30	38	36	35	26	19	18	16	8	−8	−6	0	0	21	13	6	0	5	5	15	−1	−11	12	27	20	0	8	14.9
Grant City	Maximum	50	44	42	40	38	38	38	39	38	30	27	27	25	10	15	17	18	33	32	21	19	23	26	19	10	16	20	35	33	17	31	28.1
	Minimum	40	29	21	26	24	35	34	32	20	12	15	15	3	−9	−8	−11	−7	2	10	8	−2	4	3	7	−2	−12	8	20	10	−6	3	10.5
Kansas City	Maximum	54	46	46	43	36	40	42	41	35	25	24	32	15	9	21	13	29	35	29	22	19	27	32	33	14	28	35	36	37	22	37	30.9
	Minimum	41	32	25	26	32	36	37	34	21	20	17	13	6	−4	3	−1	6	29	17	15	7	12	16	10	3	−2	24	33	10	5	21	17.5
Kidder §§	Maximum	51	42	43	34	38	39	40	36	32	32	32	32	13	5	16	8	47	32	22	18	14	25	30	17	13	22	33	37	32	19	33	28.6
	Minimum	48	31	24	36	33	37	36	34	32	18	16	32	8	−10	−1	−8	8	28	15	16	−1	7	11	17	−1	−7	20	33	32	−4	17	17.6
Lexington §§	Maximum	52	43	44	41	38	41	42	41	33	25	23	31	15	11	22	12	25	33	28	22	19	27	31	26	12	22	33	37	33	28	36	29.9
	Minimum	47	36	26	28	31	35	38	37	32	20	19	17	10	−6	2	−5	3	23	19	12	6	10	10	20	2	−7	20	31	32	2	13	18.2
Maryville §§	Maximum	50	45	47	38	38	38	42	35	33	23	21	29	15	15	16	5	28	32	25	18	15	27	29	15	13	20	31	35	30	16	30	27.5
	Minimum	38	27	17	17	21	29	34	32	29	16	14	14	1	−10	−10	−10	−10	3	11	8	−1	−3	3	7	−2	−9	−9	10	27	−5	−6	9.1
Oregon	Maximum	60	48	45	43	37	45	47	51	42	33	26	34	22	10	18	15	25	38	36	24	26	30	33	36	15	21	32	42	42	18	31	33.1
	Minimum	36	29	15	19	23	33	35	32	20	17	15	13	2	−12	−3	−9	−2	22	12	13	−1	4	11	3	−2	−6	14	28	9	−2	9	12.2
St. Joseph	Maximum	52	47	47	40	37	40	39	38	33	22	21	29	17	8	17	8	27	32	25	19	16	27	31	31	15	21	33	36	36	17	32	28.8
	Minimum	39	30	19	23	27	37	37	32	22	18	17	10	2	−8	0	−6	1	25	11	14	1	6	11	7	0	−5	20	33	8	0	15	14.4
Trenton	Maximum	55	48	40	36	37	39	43	40	35	26	24	32	30	13	17	13	21	33	32	20	18	24	27	31	13	15	26	37	34	16	30	29.2
	Minimum	46	32	24	25	28	37	35	34	26	20	19	20	7	−7	−1	−6	−4	19	14	8	3	5	8	12	−2	−9	14	25	16	−1	11	14.8

[1], [2], [3], etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged t the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

ANNUAL, 1914

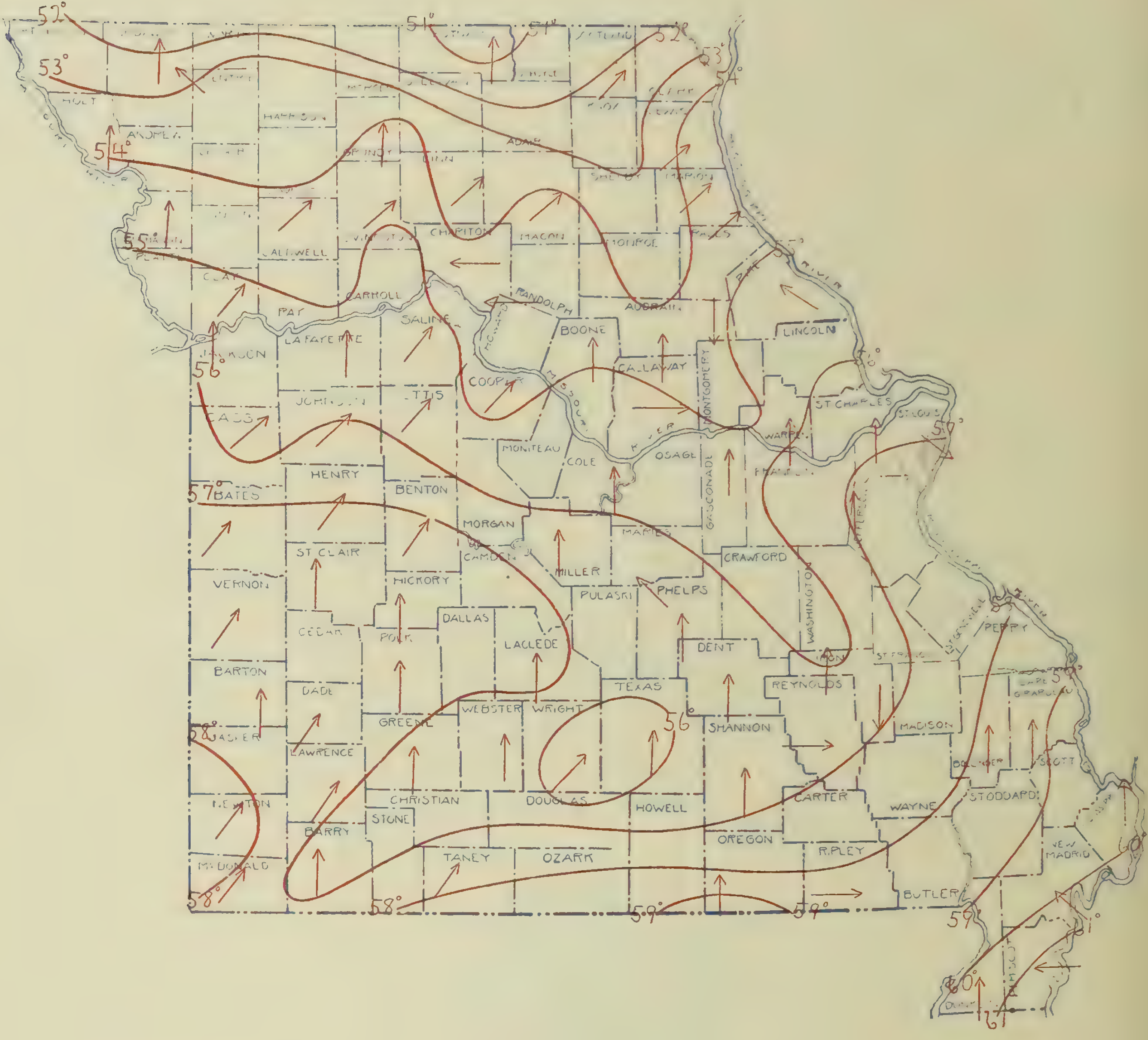
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 14, 1915

MEAN TEMPERATURE AND PREVAILING WINDS FOR YEAR 1914



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

L. XVIII. COLUMBIA, MO., YEAR, 1914. No. 13

GENERAL SUMMARY.

The warmest January since the beginning of temperature rec- ls in Missouri in 1888; severe drought, with excessive heat l sunshine from May to the middle of August, affecting more l ss seriously all crops, except wheat; abundant rains from middle of August to October, inclusive, and nearly ideal ather throughout November were the marked features of the r 1914.

Notwithstanding the fact that the annual mean temperature the State as a whole was but 1.5° above the normal, the r was a warm one, the persistence in the accumulation of t being unusually marked. February, March and Decem- were somewhat colder than normal, but the seven months m May to November, inclusive, were much warmer than al, as also was January.

At Columbia, the section center, January gave a temperature ess of 324°; at the close of April this amount had been re- ed to 205°; but from that time to November, inclusive, re was a steady accumulation of heat, amounting to 932°, l for the entire year the excess was 699°, December having uced the total amount by 233°.

The annual precipitation for 1914 was only 3.96 inches less n the 45 year normal, but the year is mentioned as a dry , owing to the pronounced lack of moisture during the grow- season. The rains of the late summer and autumn, al- ugh copious, were not enough to overcome the large defic- cy that had accumulated during the period from about the ldle of April to the middle of August; but they greatly ben- ed late corn, put the ground in good plowing condition, and de excellent pasturage, besides replenishing the water supply.

There were as a rule no freezing temperatures after April h; and the first killing frost in autumn, which also was the t general freeze, occurred on Ooctober 27th, about ten days two weeks later than the average date.

The annual mean temperature for the State was 56.1°, which .5° above normal.

The highest annual mean was 61.2°, at Caruthersville.

The lowest annual mean was 50.9°, at Unionville.

The highest temperature recorded during the year was 109°, rant City on July 12th. This was 1° lower than the max- um of last year, and 7° lower than in 1901.

The lowest temperature recorded during the year was 18° ow zero, at Steffenville.

he average precipitation for the State was 34.72 inches, or 5 inches below normal.

The greatest annual amount was 47.10 inches, at Warsaw.

he least annnal amount was 25.20 inches, at Steffenville.

he greatest local monthly amount was 16.17 inches at Kan- City in September.

The least local amount was a trace at several stations in November.

The average annual snowfall was 29.0 inches.

THE WEATHER BY MONTHS

January—The month was remarkably mild. Except a disagreeable storm of rain, sleet and snow during the last two or three days, the weather was favorable for farm, as well as other outdoor occupations as are possible during the winter season. The precipitation was markedly below the average in all sections of the State.

February—Unlike the preceding month, February was cold and stormy. There was much sleet and snow, and high winds were frequent. Heavy snow on the 22d-23rd, driven by high wind, demoralized most traffic and business for the time being, especially in the central and northeast counties. There was a strong westerly gale on the 28th, which resulted in some damage in a few eastern counties. Precipitation as a rule exceeded the average; and wheat was protected by a good covering of snow during most of the month.

March—The weather of the month did not differ much from the normal March conditions. The first 10 or 12 days and the third week were cold and blustery, and the latter half of the month was wet, but there were several days favorable for some outdoor work. The first thunderstorm showers of the season occurred on the 26th.

April—The weather was favorable throughout the State for outdoor work, farmers in particular benefiting as the weather permitted cultivation of the soil on an extensive scale. There were no freezes after the 20th. The precipitation was below normal, except in a few localities.

May—Warm, sunshiny, and dry weather prevailed. The weather was favorable for farm work, but was too dry for normal vegetable growth. At the close, the hay crop had been cut short, pasturage was brown, and all vegetation, save corn and wheat, was suffering for the want of moisture.

June—Abnormally warm and dry weather, with a high percentage of sunshine prevailed. While the month was favorable for harvesting the wheat crop, and most other outdoor occupations, except for the intense heat at times, it was unfavorable for growing crops. It was one of the driest Junes experienced in 45 years.

July—Hot and droughty weather prevailed as a rule, although timely showers in the western half of the State gave considerable relief. In the eastern half, however, conditions were near the acute stage, owing to failing springs and wells. It was the second warmest July in 27 years, and the ninth driest since 1867.

August—The generally hot and dry weather, with much sunshine, throughout the Section the first half of the month, and abundant rains on and after the 19th, thoroughly breaking the severe drought, were the most marked features of the weather. The rains put the soil in fine condition for plowing, improved corn and pastures, and replenished the nearly exhausted water supply.

September—The month, notwithstanding unusually heavy precipitation, was generally favorable for farm work; and also the weather was pleasant from a physiological standpoint. The soil was as a rule in good condition for plowing and sowing, save in a few counties where the lower lying lands were too wet. Much the larger part of the corn crop was matured at the close of the month. Pastures were excellent, and stock was in fine condition.

October—Mild temperatures, humid air and frequent showers prevailed during the first three weeks, and nearly ideal weather after the 25th. The first killing frost occurred on the 27th, about 10 or 14 days later than the average.

November—The month was among the mildest and driest Novembers on record. It was an unusually fine month for securing the corn crop, and wheat made fair growth, but needed more moisture as a rule.

December—The month as a whole was cloudy, wet and cold. Precipitation was about normal. Snows were frequent, but not unusually heavy, and did not interfere with traffic. Plentiful supplies of ice of fair quality were harvested in rural districts.

KILLING FROSTS

Stations	Last in Spring	First in Autumn
Northeast Plain		
Brunswick	April 21	Oct. 27
Columbia	April 20	Oct. 27
Fayette	April 20	Oct. 27
Fulton	April 13	Oct. 27
Hannibal	April 12	Oct. 27
Jefferson City	April 21	Oct. 27
Louisiana	April 20	Oct. 27
Macon	April 20	Oct. 27
Mexico	April 14	Oct. 27
Oakfield	April 12	Oct. 27
Palmyra	April 13	Oct. 27
St. Catherine	April 20	Oct. 27
St. Charles	April 12	Oct. 27
St. Louis (1)	April 9	Oct. 27
St. Louis (2)	....	Oct. 27
Steffenville	April 20	Oct. 27
Unionville	April 21	Oct. 27
Vandalia	April 12	Oct. 27
Warrenton	April 12	Oct. 27
Southeast Lowlands		
Cardwell	April 10	Oct. 27
Caruthersville	April 10	Oct. 28
Doniphan	April 13	Oct. 27
Jackson	April 13	Oct. 27
Marble Hill	April 19	Oct. 27
Poplar Bluff	....	Oct. 27
Sikeston	....	Oct. 27
Cairo, Ill.	April 9	Oct. 27
Ozark Plateau		
Belle	April 13	Oct. 27
Birchtree	April 12	Oct. 27
Bolivar	April 20	Oct. 27
Cassville	May 9	Oct. 27
Crocker	April 20	Oct. 27
Dean	April 20	Oct. 27
Duncan	April 20	Oct. 27
Eldon	April 20	Oct. 27
Fruit City	April 11	Oct. 27
Gano	April 20	Oct. 27
Ozark Plateau (Cont'd)		
Goodland	April 19	Oct. 27
Hollister	April 12	Oct. 27
Houston	April 13	Oct. 27
Ironton	April 13	Oct. 27
Koshkonong	April 12	Oct. 27
Lebanon	April 20	Oct. 27
Lockwood	April 12	Oct. 27
Mountain Grove	April 20	Oct. 27
Mount Vernon	April 20	Oct. 27
Neosho	April 20	Oct. 27
Rolla	April 20	Oct. 27
Springfield	April 9	Oct. 27
Wheatland	....	Oct. 27
Southwest Plain		
Amoret	April 20	Oct. 27
Appleton City	April 18	Oct. 27
Clinton	April 20	Oct. 27
Harrisonville	April 20	Oct. 27
Joplin	April 12	Oct. 27
Lamar	April 12	Oct. 27
Lamonte	April 20	Oct. 27
Marshall	April 20	Oct. 27
Nevada	....	Oct. 27
Warrensburg	April 20	Oct. 27
Warsaw	April 20	Oct. 27
Northwest Plateau		
Avalon	April 20	Oct. 27
Bethany	....	Oct. 27
Conception	April 20	Oct. 27
Grant City	April 20	Oct. 27
Kansas City	April 9	Oct. 27
Kidder	April 20	Oct. 27
Lexington	April 20	Oct. 27
Liberty	April 20	Oct. 27
Maryville	April 20	Oct. 27
Oregon	April 20	Oct. 27
St. Joseph	April 20	Oct. 27
Tarkio	....	Oct. 27
Trenton	April 20	Oct. 27

Comparative Annual Data for the State

Year	Temperature: Mean	Temperature: Maximum	Temperature: Minimum	Precipitation
1888	52.9	111	−32	41.22
1889	54.3	107	− 9	37.91
1890	54.7	106	−19	35.71
1891	53.9	108	−11	38.04
1892	53.4	101	−11	42.76
1893	52.7	107	−20	38.19
1894	55.1	111	−35	33.18
1895	52.9	106	−26	39.30
1896	55.5	108	−10	44.63
1897	55.0	108	−16	38.82
1898	54.4	104	−20	53.67
1899	54.0	108	−32	37.32
1900	55.6	105	−16	38.31
1901	55.5	116	−29	25.28
1902	54.1	103	−17	44.96
1903	53.6	102	−25	40.15
1904	53.2	100	−23	41.62
1905	53.6	103	−40	45.43
1906	55.1	101	−13	37.34
1907	55.6	109	−15	41.81
1908	56.7	102	−10	42.56
1909	56.7	110	−20	45.16
1910	55.0	109	−24	36.86
1911	56.9	113	−19	38.94
1912	53.6	105	−36	38.68
1913	56.5	110	−12	37.47
1914	56.1	109	−18	34.72
Average 27 yrs.	54.7	116	−40	39.79

COMPARATIVE DATA FOR THE STATE

Monthly and Annual Precipitation

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept	Oct	Nov	Dec.
1867	1.73	4.22	2.56	2.73	7.17	3.25	5.66	2.40	1.89	1.52	1.43	1.62
1868	1.06	0.65	5.52	5.60	4.26	3.69	2.54	5.61	4.96	1.98	2.60	2.85
1869	2.72	1.61	2.88	3.12	4.56	6.95	4.45	4.69	2.90	1.85	4.16	2.40
1870	1.13	**0.27**	2.34	**1.71**	2.00	**1.67**	2.54	7.07	2.93	4.00	1.33	1.74
1871	2.46	2.49	1.92	1.82	3.32	3.27	4.19	3.24	**0.63**	4.54	2.32	1.50
1872	0.79	1.28	2.51	3.54	6.52	2.79	7.15	3.50	3.39	1.33	6.94	2.61
1873	4.10	1.50	2.10	5.27	4.36	4.12	2.95	1.68	4.24	2.20	1.25	4.47
1874	2.44	2.33	3.24	3.91	2.80	2.80	2.52	2.37	4.17	1.71	2.25	1.29
1875	0.47	2.19	3.02	3.23	4.84	6.99	**9.77**	2.92	1.35	1.57	**0.43**	2.59
1876	2.34	1.43	4.44	3.99	3.85	6.15	6.31	4.97	3.73	1.74	2.08	**0.17**
1877	1.19	0.64	3.70	3.90	5.18	8.19	2.26	3.85	2.94	6.32	2.67	2.89
1878	1.72	2.55	3.27	4.29	5.57	3.30	3.74	2.60	2.27	1.89	1.19	2.86
1879	1.37	1.14	1.11	2.61	2.27	6.09	4.64	2.43	2.58	2.16	**4.44**	2.52
1880	1.90	2.27	2.00	2.92	4.47	2.98	3.50	4.59	2.79	2.19	2.07	1.28
1881	0.74	4.16	2.74	2.22	4.04	5.83	1.52	1.51	5.10	6.62	3.84	1.90
1882	1.57	4.52	2.72	3.72	5.46	4.87	4.49	2.26	2.53	4.71	3.16	1.75
1883	1.38	**4.69**	1.65	1.98	5.39	7.88	5.17	2.31	0.78	**6.97**	2.55	1.38
1884	1.21	2.93	2.73	3.29	3.37	3.83	6.20	3.47	6.16	2.74	1.89	4.05
1885	2.19	1.02	0.76	5.11	3.29	6.11	4.30	4.06	6.09	3.06	1.46	1.44
1886	2.27	1.23	1.95	2.81	3.97	5.05	**1.34**	2.67	4.91	1.90	2.23	1.18
1887	1.46	3.11	1.91	2.98	3.96	4.25	2.35	3.34	3.13	1.83	2.25	2.74
1888	1.91	2.04	4.02	1.83	5.35	6.20	3.31	**7.25**	1.11	2.65	3.26	2.29
1889	2.36	2.57	1.98	2.52	6.56	4.66	3.75	1.96	4.66	2.57	3.43	0.96
1890	4.25	2.24	2.61	3.17	3.47	2.59	2.98	4.84	3.98	2.24	2.31	1.03
1891	1.52	2.28	3.01	3.94	4.26	6.14	3.55	5.34	**0.63**	1.11	2.60	1.99
1892	1.80	4.15	3.11	5.66	7.80	3.18	4.98	2.42	2.39	2.28	2.60	2.38
1893	**0.45**	1.98	2.86	**7.84**	5.89	4.61	4.91	2.20	2.92	0.99	1.59	0.55
1894	2.21	2.52	2.93	3.17	3.99	3.92	2.48	1.58	4.93	1.74	1.58	2.13
1895	1.49	0.55	2.14	1.95	4.08	5.77	6.75	4.23	2.45	0.35	3.37	**6.13**
1896	1.17	1.61	2.05	3.51	**9.09**	**8.32**	5.87	3.25	4.17	2.48	2.18	0.93
1897	4.90	2.30	6.07	4.55	2.56	6.18	3.22	2.39	0.74	**0.71**	2.40	2.80
1898	3.98	1.62	**7.09**	3.65	7.90	5.88	5.58	3.03	6.74	4.23	2.28	1.69
1899	1.55	2.17	2.93	3.70	6.26	3.87	4.51	3.35	2.04	2.93	1.90	2.11
1900	1.22	3.92	1.48	3.36	3.69	4.79	4.11	3.51	4.81	4.18	2.58	0.69
1901	1.30	1.63	3.74	2.85	**1.47**	2.13	2.02	1.88	2.31	1.64	1.38	2.93
1902	1.23	1.50	3.49	2.66	5.03	6.57	4.59	6.16	4.78	2.52	3.52	2.91
1903	1.36	2.92	3.35	3.54	7.10	3.25	3.22	5.40	4.41	2.85	1.24	1.51
1904	2.85	0.91	4.14	5.75	5.03	6.42	4.65	5.46	3.85	0.96	0.22	1.50
1905	1.79	1.64	2.99	3.19	4.87	3.09	7.45	4.69	**7.67**	4.64	1.14	1.45
1906	3.64	2.28	3.93	2.24	2.16	4.95	3.53	4.72	4.15	0.87	2.60	2.27
1907	**5.10**	1.65	2.82	3.43	5.56	5.84	4.57	3.71	1.93	2.90	2.52	1.84
1908	1.51	4.32	2.58	5.30	6.92	6.30	2.23	3.87	1.80	2.74	4.14	0.85
1909	2.17	3.38	3.07	4.35	5.34	5.21	6.41	**0.55**	4.62	2.77	4.13	2.86
1910	1.83	1.98	**0.66**	3.51	6.62	3.92	6.70	2.77	5.58	2.71	0.38	1.25
1911	1.20	3.64	1.85	4.99	1.55	1.78	3.95	4.20	7.13	3.30	2.55	2.80
1912	1.06	2.45	4.62	5.98	3.86	4.78	2.74	4.19	3.06	3.83	1.52	0.59
1913	3.67	2.21	4.36	3.33	3.05	2.57	3.13	1.06	4.63	4.46	2.73	2.27
1914	1.42	2.71	2.75	3.14	**1.47**	2.37	2.67	4.25	6.27	4.54	0.65	2.48
Mean	1.98	2.28	2.95	3.63	4.63	4.70	4.19	3.54	3.64	2.76	2.32	2.06

Monthly and Annual Mean Temperature.

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An
1888	21.5	33.0	38.5	57.9	62.1	72.6	79.3	74.0	65.2	53.6	41.6	35.9	52.
1889	31.8	29.3	44.3	55.7	63.5	70.7	77.1	73.5	64.7	53.8	39.9	**46.8**	54
1890	33.8	35.5	37.3	56.2	62.8	77.2	79.6	73.3	63.7	54.8	46.5	36.0	54
1891	34.1	32.7	36.6	56.8	61.5	73.3	**72.7**	73.2	70.6	55.7	39.6	39.8	53
1892	24.0	37.7	38.9	53.1	60.7	74.5	75.8	74.3	67.8	57.5	40.1	29.4	53
1893	22.5	27.9	40.5	53.9	61.8	72.6	77.3	**72.8**	69.9	56.7	40.9	35.2	**52.**
1894	31.4	30.8	47.7	56.1	63.7	74.5	76.5	77.0	68.5	57.6	41.0	36.7	55.
1895	24.7	23.6	42.4	57.9	64.6	73.2	74.4	75.3	71.8	**51.2**	41.6	34.3	52.
1896	32.9	35.6	39.2	**61.9**	**70.1**	72.5	77.3	76.6	65.0	54.1	42.3	38.6	55.
1897	28.4	34.8	44.2	54.4	62.4	73.6	78.7	74.1	**74.3**	**62.5**	43.4	29.3	55.
1898	34.3	35.4	44.7	52.5	65.2	75.3	76.1	75.8	70.9	53.5	39.9	28.7	54.
1899	30.2	**20.4**	37.4	54.0	66.9	74.3	76.0	78.8	67.4	62.4	49.5	30.4	54.
1900	34.5	26.2	40.4	56.7	66.3	73.3	76.9	80.3	71.1	62.4	43.7	35.6	55.
1901	35.0	28.1	42.7	53.3	63.8	77.9	**85.4**	78.4	68.9	60.1	43.6	28.5	55.
1902	30.1	24.0	45.3	53.9	69.4	70.9	77.0	75.0	**63.2**	59.5	50.1	30.7	54.
1903	31.4	29.8	46.8	55.3	65.1	**67.3**	77.4	74.4	66.4	57.2	40.9	30.2	53.
1904	27.0	30.0	44.8	49.0	63.1	70.5	74.2	73.7	69.6	57.6	46.3	32.9	53.
1905	22.3	21.5	50.3	54.9	64.9	75.2	73.4	76.4	69.6	55.1	45.8	33.3	53.
1906	35.6	33.7	**31.6**	59.5	66.3	72.7	74.7	76.6	71.9	56.3	42.5	36.1	55.
1907	34.3	34.8	53.9	**48.7**	**59.5**	71.2	78.4	77.3	68.9	56.7	43.8	37.7	55.
1908	34.4	35.6	50.1	56.6	66.1	72.3	76.5	76.4	71.6	56.3	47.6	38.4	56.
1909	3.37	**38.8**	44.5	54.8	63.3	73.9	76.7	79.5	68.7	57.2	**53.6**	**24.9**	56.
1910	32.3	28.3	**55.8**	54.8	60.1	70.4	76.8	74.7	69.5	59.4	42.0	31.2	55.
1911	34.6	38.1	46.8	53.5	68.8	78.9	78.0	75.4	73.7	56.9	**39.1**	36.7	**56.**
1912	**20.0**	28.3	35.2	56.0	67.6	69.5	78.8	76.2	68.6	59.1	45.9	36.5	53.
1913	33.1	29.8	40.6	56.2	65.8	75.4	80.2	**82.8**	69.4	54.7	51.7	38.3	56.
1914	**38.1**	28.3	43.2	55.2	66.6	**79.3**	80.5	78.0	6.96	59.2	48.6	26.8	56.
Mean	30.6	30.8	43.2	55.2	64.5	73.4	77.2	76.1	68.9	57.1	44.1	34.0	54.

Climatological data for Year, 1914.

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind.
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
Northeast Plain																				
Boonville	Cooper	600	....	....	....	....	....	....	38	30.17	5.78	Sept.	0.35	Nov.	16.9	84	185^{d}	14^{d}	162	sw
Brunswick	Chariton	652	27	54.2	98	July 27	−10	Dec. 26	35	36.29	7.48	Sept.	0.13	Nov.	30.5	86	179	39	147	e
Columbia	Boone	784	25	55.4	100	July 16	− 6	Dec. 26	25	31.60	7.35	Aug.	0.32	Nov.	28.0	109	107	94	164	s
Fayette	Howard	725	30	53.7	102	July 16	−11	Dec. 26	32	28.76	5.45	Aug.	0.17	Nov.	28.2	75	187^{l}	47^{l}	119^{l}	.....
Fulton	Callaway	818	15	56.0	103	July 27†	− 6	Dec. 26	23	30.54	3.93	Oct.	0.81	Jan.	35.2	88	....	....	....	w
Glasgow	Howard	618	....	....	....	....	....	....	36	34.24	6.68	Oct.	0.06	Nov.	27.0	62	210	13	142	e
Gorin	Scotland	700	....	....	....	....	....	....	28	31.22	9.13	Sept.	0.44	Nov.	22.6	73	134	100	131	sw
Hannibal	Marion	534	23	54.4	101	July 11	− 8	Dec. 26	23	27.38	4.99	Aug.	0.17	Nov.	36.6	106	162	101	102	sw
Hermann	Gasconade	482	....	....	....	....	....	....	40	30.29	5.26	Oct.	0.38	May	40.0	116	130	65	170	s
Jefferson City	Cole	628	28	55.3	106	July 26	− 4	Feb. 7†	32	36.32	5.85	Oct.	0.83	Jan.	41.4	101	214	6	145	s
Keytesville	Chariton	660	....	....	....	....	....	....	1	34.00	5.49	Sept.	0.20	Nov.	27.7	70	....	....	....	......
Louisiana	Pike	500	21	....	104	July 16	−14	Dec. 26	37	30.74	5.92	Oct.	0.45	Nov.	34.2	90	....	....	....	se
Macon	Macon	881	2	54.0	99	July 10†	−14	Dec. 26	2	32.28	5 80	March	0.27	Nov.	25.5	86	161	94	110	sw
Mexico	Audrain	797	26	54.2	103	June 25†	− 9	Dec. 26†	37	36.66	8.31	Aug.	0.56	Nov.	43.4	118	180	27	158	s
Oakfield	Franklin	793	23	57.1	106	July 11	− 1	Feb. 7†	23	32.14	5.59	Oct.	0.38	June	53.0	85	79	178	108	s
Palmyra	Marion	652	3	53.8	106	July 11	−14	Dec. 26	3	28.84	4.72	Sept.	0.06	Nov.	29.7	75	153	113	99	sw
St. Catherine	Linn	914	1	53.7	99	July 16	−12	Dec. 26	1	30.64	7.85	Sept.	0.15	Nov.	28.2	90	146	159	60	sw
St. Charles	St. Charles	614	28	56.6	107	July 11	− 1	Dec. 15	37	31.32	4.40	Oct.	0.91	June	34.5	69	164	89	112	s
St. Louis (1)	St. Louis City	717	42	57.4	102	July 11	1	Feb. 7	44	35.63	7.45	Oct.	0.10	June	37.6	107	163	111	91	nw
St. Louis (2)	......do.	578	3	56.8	104	July 11	1	Feb. 7	3	40.11	8.36	Sept.	0.24	June	37.5	111	160	94	111	se
Steffenville	Lewis	576	17	55.5	106	Aug. 7	−18	Dec. 26	22	25.16	5.31	Sept.	0.15	Nov.	32.0	72	152^{b}	139^{b}	72^{b}	sw
Unionville	Putnam	1,072	22	50.9	103	July 12	−16	Dec. 26	22	38.37	11.01	Sept.	0.22	Nov.	36.0	86	143	69	153	s
Vandalia	Audrain	796	4	55.7	104	June 26†	− 6	Dec. 26	4	......	3.55	Oct.	....	.....	....	....	179	58	128	n
Warrenton	Warren	865	32	55.0	104	July 11†	− 5	Dec. 26	25	28.53	4.60	Oct.	0.53	May	33.0	92	131	78	156	s
Southeast Lowlands																				
Cardwell	Dunklin	225	3	60.2	105	July 16	2	Dec. 15	3	37.64	5.74	Aug.	0.34	July	....	71	216^{d}	72^{d}	73^{d}	s
Caruthersville	Pemiscott	220	19	61.2	106	June 25	5	Dec. 15	24	38.05	5.53	Oct.	0.17	June	12.5	81	217	45	103	e
Doniphan	Ripley	440	11	58.1	104	June 26†	− 8	Dec. 15	11	38.11	5.58	Dec.	0.27	June	20.5	93	170^{a}	83^{a}	111^{a}	sw
Jackson	Cape Girardeau	458	25	59.0	108	July 16	−11	Dec. 15	24	34.71	5 40	Oct.	0.89	Nov.	29.5	73	113	113	139	s
New Madrid	New Madrid	285	....	....	....	....	....	....	21	36.66	5.84	Dec.	0.63	June	11.0	104	181	19	165	se
Cairo, Ill.	Alexander, Ill	359	43	58.8	101	July 12	4	Dec. 15	43	28.22	3.85	Feb.	0.35	July	14.2	96	133	87	145	s
Ozark Plateau																				
Arlington	Phelps	695	....	....	....	....	....	....	12	27.37	5.12	Sept.	0.38	June	41.1	80	180	32	153	se
Cassville	Barry	1,500	4	56.1	100	July 28	− 7	Dec. 15	4	31.71	4.82	Aug.	0.05	Nov.	17.5	78	216	72	77	s
Dean	McDonald	1,000	16	57.4	99	June 19	− 2	Feb. 7	16	31.55	5.67	July	0.60	Nov.	11.5	....	221^{z}	21^{z}	99^{z}	sw
Duncan	Webster	1,400	1	55.9	103	July 15†	− 6	Dec. 15	1	37.35	10.86	Sept.	0.71	Nov.	37.2	99	169^{b}	91^{b}	105^{b}	s
Eldon	Miller	934	3	56.4	106	July 28	− 7	Dec. 14	3	37.95	8.39	Sept.	0.69	Jan.	40.7	106	89	230	46	s
Fruit City	Reynolds	1,150	1	56.8	101	July 16†	1	Dec. 15	1	32.40	4.69	Sept.	0.40	July	12.7	65	203	97	65	w
Gano	Dent	1,250	12	57.0	106	July 16	− 2	Dec. 14	12	42.48	10.68	Oct.	0.23	May	34.5	83	193	81	91	s
Goodland	Iron	1,000	10	....	....	....	−10	Dec. 15	10	33.16	5.78	April	0.42	Nov.	....	....	161	94	110	s
Hollister	Taney	1,000	5	57.9	100	June 25†	0	Dec. 15	5	30.70	7.35	Aug.	0.45	Nov.	17.2	68	246	0	119	sw
Houston	Texas	1,280	23	56.4	103	July 16	− 2	Dec. 15	23	35.34	8.36	Sept.	0.24	May	21.0	71	212	60	93	s
Ironton	Iron	925	35	56.2	107	July 16	−13	Dec. 15	37	31.23	5.40	Sept.	0.51	May	29.5	93	96	127	142	n
Koshkonong	Oregon	911	14	59.3	104	July 16†	− 2	Dec. 15	14	40.98	6.94	April	0.68	June	27.0	89	179^{e}	82^{e}	99^{e}	sw
Lebanon	Laclede	1,265	27	57.3	106	July 28	− 5	Dec. 14	26	46.15	9.30	Sept.	1.30	Nov.	28.0	97	189	61	115	s
Lockwood	Dade	1,088	9	57.2	100	June 19	− 1	Dec. 14	21	34.93	5.33	Aug.	0.37	Nov.	24.7	78	178^{h}	68^{h}	111^{h}	sw
Mountain Grove	Wright	1,490	14	56.0	102	July 16	− 5	Feb. 7	16	33.95	7.02	Sept.	1.11	Jan.	15.5	86	142^{a}	96^{a}	126^{a}	sw
Mount Vernon	Lawrence	1,480	21	57.1	103	July 28	− 2	Dec. 14†	36	33.14	5.46	Sept.	0.30	Nov.	14.0	64	191^{j}	63^{j}	101^{j}	sw
Neosho	Newton	1,083	29	58.4	98	June 28†	0	Jan. 30†	32	36.29	6.35	July	0.31	Nov.	16.1	101	216^{a}	58^{a}	90^{a}	sw
Rolla	Phelps	1,139	15	56.5	104	July 16	− 8	Dec. 14	34	40.69	6.74	Oct.	0.83	May	45.4	79	207	80	78	s
Springfield	Greene	1,350	27	56.4	97	June 19†	− 2	Feb. 7†	27	34.18	4.70	Aug.	0.71	Nov.	21.0	106	153	104	108	s
Wheatland	Hickory	920	....	....	....	....	....	....	23	32.50	5.52	Sept.	0.16	May	49.0	58	183^{a}	96^{a}	85^{a}	s
Southwest Plain																				
Amoret	Bates	850	6	57.3	102	July 16	− 4	Dec. 14	6	39.57	7.20	Aug.	0.55	Nov.	19.2	82	171^{a}	87^{a}	106^{a}	sw
Appleton City	St. Clair	853	23	....	98	Aug. 7	....	....	24	......	5.25	Oct.	....	.....	34.0	....	111^{a}	192^{a}	61^{a}	s
Clinton	Henry	800	8	57.2	103	June 20	− 5	Dec. 14	29	42.07	7.07	Sept.	0.48	Nov.	26.0	63	150	150	65	sw
Harrisonville	Cass	912	38	54.8	102	July 16	− 8	Dec. 14	42	39.13	6.22	Aug.	0.19	Nov.	28.0	99	123	46	196	sw
Lamar	Barton	964	28	57.6	104	July 28	0	Feb. 7†	34	33.71	6.57	Aug.	0.74	Nov.	18.0	77	165	64	136	s
Lamonte	Pettis	863	7	55.4	101	July 16	−12	Dec. 14†	24	36.77	9.80	Sept.	T.	Nov.	31.0	76	130	148	87	sw
Marshall	Saline	779	24	55.2	103	July 16	− 8	Dec. 14†	24	39.74	9.23	Sept.	0.43	Nov.	38.6	89	170^{g}	94^{g}	94^{g}	sw
Nevada	Vernon	860	....	....	....	....	....	....	21	33.91	5.59	Oct.	0.50	Nov.	33.7	81	121^{g}	189^{g}	48^{g}	sw
Warrensburg	Johnson	883	32	56.7	104	July 16	− 7	Dec. 14	36	37.83	6.67	Sept.	0.21	Nov.	32.2	108	152	119	94	sw
Warsaw	Benton	883	11	57.7	104	July 28	− 9	Dec. 15	11	47.09	7.78	Oct.	1.15	Nov.	41.0	92	170	139	56	sw
Northwest Pleteau																				
Avalon	Livingston	730	18	55.3	105	July 16	−11	Dec. 26	30	36.81	9.53	Sept.	0.32	Nov.	32.5	68	224	74	67	sw
Conception	Nodaway	982	26	52.8	100	July 12	−13	Dec. 26	30	32.77	10.38	Sept.	T.	Nov.	26.5	69	119	159	87	se
Grant City	Worth	1,130	13	53.2	109	July 12	−12	Dec. 26	23	29.10	9.77	Sept.	0.15	Nov.	20.0	65	217	37	111	nw
Kansas City	Jackson	963	26	55.9	101	July 16	− 4	Feb. 7†	26	43.20	16.17	Sept.	0.26	Nov.	31.3	107	141	128	96	s
Kidder	Caldwell	1 017	24	54.3	100	July 27†	−10	Dec. 14	23	39.21	10.44	Sept.	0.14	Nov.	34.8	96	176	71	118	sw
Lexington	Lafayette	813	29	55.1	100	July 16	− 7	Feb. 7†	33	37.51	9.50	Sept.	0.29	Nov.	27.4	89	203	7	155	s
Liberty	Clay	864	25	56.3	104	July 16	− 7	Dec. 16	26	40.08	12.94	Sept.	0.05	Jan.	32.5	71	174^{h}	95^{h}	88^{h}	sw
Maryville	Nodaway	1.160	21	52.0	106	July 12	−11	Feb. 7†	24	31.28	9.09	Sept.	0.15	Nov.	30.0	97	219	28	118	s
Oregon	Holt	1.113	60	53.8	100	July 16	−12	Dec. 14	59	27.64	8.62	Sept.	0.06	Nov.	33.3	80	198	72	95	s
St. Joseph	Buchanan	967	7	54.7	102	July 16	− 8	Dec. 14	44	29.45	6.21	Sept.	0.10	Nov.	33.3	90	152	107	106	s
Trenton	Grundy	812	20	54.1	100	July 16	− 9	Dec. 26	20	35.38	11.87	Sept.	0.30	Nov.	20.6	101	185	58	122	s
State means and extremes		....	....	56.1	109‡	July 12	−18‖	Dec. 26	....	34 72	16.17§	Sept.	T. ¶	Nov.	29.0	86	166	85	114	s

†, And other dates; ‡, At Grant City; ‖, At Steffenville; §, At Kansas City; ¶, At Lamonte and Conception. ^{a}, ^{b}, ^{c}, etc., indicate the number of days missing from records with which they are placed, as ^{a}, 1; ^{b}, 2; ^{c}, 3, etc.

Monthly and Annual Precipitation for the Year 1914, with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
Northeast Plain.																										
Boonville	1.21	−0.79	1.62	−1.10	1.77	−1.37	1.99	−2.01	1.48	−3.99	0.98	−4.97	4.49	+0.13	4.53	+1.14	5.78	+1.38	3.98	+1.21	0.35	−2.08	1.96	[illegible]	[illegible]	−12
Brunswick	1.08	−0.63	2.23	+0.27	3.11	+0.68	2.61	−0.59	0.73	−1.24	3.96	−1.73	3.57	−1.03	3.88	−0.14	7.48	+3.49	5.42	+2.56	0.13	−1.90	2.09	[illegible]	[illegible]	[illegible]
Columbia	0.55	−1.68	2.51	+0.38	3.36	+0.33	1.71	−1.96	1.37	−3.49	3.14	−1.24	1.70	−1.95	7.35	+1.3	2.56	−0.29	5.11	+2.72	0.32	−1.96	1.86	[illegible]	[illegible]	[illegible]
Fayette	1.31	−0.72	1.89	−0.21	2.47	−0.21	1.71	−1.74	0.93	−3.76	2.10	−2.58	2.15	−1.75	5.15	+2.52	1.24	−0.41	5.11	+2.71	0.17	[illegible]	1.2	[illegible]	[illegible]	[illegible]
Fulton	0.81	−1.78	2.65	+0.51	1.68	−1.22	3.38	−0.80	3.32	−1.39	1.95	−2.94	3.10	−1.57	3.41	+0.11	2.80	−1.32	3.93	+1.47	1.18	−1.10	[illegible]	[illegible]	[illegible]	[illegible]
Glasgow	1.06	−0.67	1.72	−0.58	2.78	+0.25	3.04	−0.07	1.31	−3.28	1.38	−3.29	5.00	+1.17	4.00	+0.90	5.82	+1.85	6.68	+4.21	0.06	−1.74	1.36	[illegible]	[illegible]	[illegible]
Gorin	0.76	−0.93	0.94	−0.72	1.11	−1.45	2.54	−1.53	1.91	−2.55	3.28	−0.35	1.90	−2.69	3.31	−0.50	9.13	+4.91	4.19	+1.91	0.44	−1.5	1.73	[illegible]	[illegible]	[illegible]
Hannibal	0.88	−1.32	2.94	+1.34	1.58	−1.18	2.51	−0.74	0.95	−4.05	2.60	−0.92	0.87	−2.88	1.99	−1.61	4.48	+0.92	3.69	+2.0	0.17	−1.78	1.72	[illegible]	[illegible]	[illegible]
Hermann	1.75	−0.50	2.28	−0.18	0.91	−2.21	2.42	−1.38	0.38	−3.93	1.97	−2.58	3.05	−0.97	3.69	+0.70	4.31	+0.21	5.26	+2.58	1.77	−1.06	2.5	[illegible]	[illegible]	[illegible]
Jefferson City	0.83	−1.45	3.23	+0.99	1.85	−1.26	2.91	−0.65	1.18	−3.21	2.16	−2.12	2.13	−1.60	7.04	+4.37	5.16	+2.07	5.55	+3.56	1.11	−1.17	2.84	[illegible]	[illegible]	[illegible]
Keytesville	1.00	....	1.85	....	3.33	....	2.02	....	0.84	....	3.45	....	4.25	....	4.94	....	5.49	....	1.49	....	0.29	....	2.14	....	[illegible]	....
Louisiana	0.70	−1.36	1.90	−0.59	4.07	+1.48	3.60	+0.59	1.48	−2.99	0.94	−3.25	1.84	−1.69	3.21	−0.40	4.64	+1.31	5.92	+3.65	0.45	−1.79	1.8	[illegible]	[illegible]	−4
Macon	1.75	+0.31	1.97	−0.18	5.80	+3.13	2.74	−0.15	0.55	−3.33	2.53	−2.39	2.48	−0.79	2.85	−0.65	5.20	+1.24	4.35	+1.34	0.27	−1.56	1.7	[illegible]	[illegible]	−2
Mexico	0.84	−1.27	3.44	+0.94	1.87	−0.78	3.65	−0.44	0.69	−4.10	0.69	−4.65	5.01	+0.96	8.31	+5.58	5.05	+1.09	4.74	+2.52	0.56	−1.88	2.41	[illegible]	[illegible]	−1
Oakfield‡‡	1.96	−0.43	4.02	+1.44	1.80	−1.90	3.54	−0.66	1.09	−4.31	0.38	−4.25	1.20	−3.62	4.04	+0.86	1.19	+0.20	5.59	+2.99	2.67	−0.66	2.26	[illegible]	[illegible]	−10
Palmyra	1.18	....	3.80	....	2.94	....	3.86	....	0.80	....	1.17	....	2.16	....	3.35	....	4.72	....	2.93	....	0.06	....	1.87	....	28.84	....
St. Catharine	1.11	....	1.70	....	2.51	....	2.29	....	0.43	....	2.07	....	2.46	....	4.14	....	7.85	....	4.13	....	0.15	....	1.8	....	[illegible]	....
St. Charles	3.02	+0.69	3.59	+0.61	2.55	+0.30	2.79	−0.61	1.49	−2.84	0.91	−3.29	1.47	−2.07	3.94	+0.99	3.56	−0.85	4.40	+1.98	1.57	−1.28	2.03	[illegible]	[illegible]	−4
St. Louis(1)	2.21	−0.06	4.63	+1.88	1.25	−2.18	1.92	−1.60	0.69	−3.55	0.10	−4.37	1.52	−1.91	5.42	+2.76	6.68	+3.77	7.45	+5.14	1.5	−1.35	2.23	[illegible]	[illegible]	[illegible]
St. Louis(2)	2.65	....	4.98	....	1.35	....	2.00	....	0.66	....	0.24	....	2.12	....	5.57	....	8.36	....	8.32	....	1.6	....	2.26	....	40.11	....
Steffenville	1.00	−1.32	1.87	−0.17	2.99	+0.10	2.47	−1.16	0.42	−4.86	1.82	−2.07	2.10	−2.99	3.09	−0.38	5.51	+0.86	2.62	+0.72	0.15	−1.70	1.32	−0.42	25.16	−13
Sublett ‡‡	1.00	−0.73	2.00	−0.01	2.50	−0.21	4.30	+0.76	0.50	−5.04	2.35	−2.38	6.00	+1.27	....	....	....	....	....	....	....	....	....	....	....	....
Unionville	1.25	−0.81	1.86	−0.13	1.83	−0.45	2.31	−1.35	1.97	−3.88	3.40	−0.78	4.38	0.00	3.47	−0.55	11.01	+6.37	4.31	+2.11	0.22	−1.60	2.36	+0.73	38.37	−0
Vandalia	0.60	....	1.65	....	0.96	....	2.30	....	0.84	....	1.80	....	2.61	....	3.33	....	3.58	....	3.55	....	....	....	2.04	....	....	....
Warrenton	2.22	+0.39	2.94	+0.40	1.20	−2.20	2.57	−1.32	0.53	−4.38	0.73	−3.80	1.55	−2.46	4.31	+1.57	3.56	−0.29	1.60	−2.05	1.36	−1.33	2.90	+0.70	28.53	−11
Southeast Lowlands.																										
Cape Girardeau	2.86	....	4.09	+1.73	1.79	....	2.15	−1.92	0.70	−2.95	2.85	−0.56	0.87	....	....	....	....	....	....	....	....	....	4.24	....	....	....
Cardwell	2.39	....	3.41	....	4.01	....	2.94	....	0.83	....	2.75	....	0.34	....	5.74	....	4.84	....	3.33	....	1.66	....	5.46	....	37.61	....
Caruthersville	1.61	−2.37	4.98	+0.79	3.42	−0.52	3.06	−0.81	1.91	−2.21	0.17	−3.79	0.88	−2.82	5.32	+2.52	5.04	+1.86	5.53	+2.92	1.28	−3.17	4.85	−0.63	38.05	−7
Doniphan	3.47	−0.50	4.34	+0.54	3.48	−0.44	3.91	−1.61	1.12	−2.91	0.27	−4.34	1.85	−1.56	5.37	+1.79	4.30	−0.58	3.27	+0.31	1.15	−1.92	5.58	+3.03	38.11	−10
Jackson	3.07	−0.56	4.60	+1.28	2.97	−1.85	3.06	−1.48	1.22	−3.06	2.51	−1.73	0.96	−2.81	3.81	+0.75	2.44	−1.15	5.40	+2.45	0.89	−2.60	3.78	+0.50	34.71	−10
Marble Hill	1.30	−1.94	3.30	−0.37	3.35	−1.42	2.20	−2.44	1.20	−3.18	1.35	−2.97	4.98	+0.08	....	....	2.41	−1.2	6.18	+3.79	0.92	−2.29	4.1	+0.94	....	....
New Madrid	2.51	−2.73	5.23	+1.02	2.96	−2.76	3.08	−1.29	2.01	−2.31	0.63	−3.47	0.65	−3.70	4.21	+0.74	3.80	+0.47	4.72	+1.38	1.02	−3.17	5.84	+1.62	36.66	−14
Poplar Bluff	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.66	−0.49	5.49	+2.66	1.53	−1.95	4.82	+1.10	....	....
Sikeston	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.48	+1.02	0.81	−3.03	4.49	+0.65	....	....
Cairo, Ill	1.64	−2.18	3.85	+0.52	3.31	−0.71	2.64	−0.93	2.66	−1.17	0.92	−3.39	0.35	−3.10	2.52	−0.41	3.73	+1.26	2.45	−0.18	0.61	−3.38	3.5	+0.18	28.22	−13
Ozark Plateau.																										
Arlington	0.64	−1.49	1.98	−1.00	1.39	−1.62	3.44	−0.30	1.24	−3.21	0.38	−3.30	1.90	−1.54	4.78	+1.06	5.12	+1.55	3.33	+1.22	0.93	−1.96	2.24	+0.74	27.37	−9
Belle	1.05	−1.18	3.68	+1.05	2.15	+1.13	2.67	−1.41	1.70	−3.58	1.20	−3.68	3.27	−1.02	5.62	+2.06	....	....	6.24	+3.90	1.01	−1.50	1.95	−0.32	....	....
Birchtree	1.51	−1.21	2.94	+0.05	2.36	−2.54	7.58	+2.89	1.80	−2.34	....	....	1.43	−3.36	4.32	+0.35	7.73	+4.26	1.79	−0.76	0.90	−1.93	3.74	+1.24	....	....
Bolivar	1.26	−0.74	2.83	+1.49	3.29	+0.28	4.33	+0.49	2.75	−2.66	3.74	−1.82	2.91	−0.99	3.32	−0.34	....	....	3.77	+1.04	0.99	−1.75	4.09	+1.62	....	....
Cassville	2.17	−0.24	1.18	....	3.75	....	2.83	....	4.21	....	1.79	....	4.31	....	4.82	....	2.29	....	1.99	....	0.65	....	2.32	....	31.71	....
Crocker	0.70	....	2.70	....	1.38	....	0.75	....	1.55	....	1.05	....	....	....	6.49	....	8.15	....	4.83	....	1.65	....	1.14	....	....	....
Dean‡‡	0.80	−1.12	1.58	−0.43	2.76	−0.87	1.71	−2.70	4.71	−1.39	1.98	−3.85	5.67	+1.39	4.16	+0.36	3.07	−0.23	3.47	+0.48	0.60	−2.39	1.04	−1.06	31.55	−11
Duncan	1.70	....	2.43	....	2.10	....	5.56	....	1.45	....	0.87	....	2.63	....	3.16	....	10.86	....	2.79	....	0.71	....	3.09	....	37.35	....
Eldon	0.69	−1.39	3.19	+0.47	2.37	−1.30	3.38	−1.35	1.18	−3.50	2.27	−2.54	1.92	−2.32	3.89	−0.06	8.39	+4.60	7.15	+5.02	1.43	−0.89	2.09	−0.41	37.95	−3
Fruit City	1.21	....	2.38	....	2.02	....	4.77	....	0.59	....	4.63	....	0.40	....	3.18	....	4.69	....	4.39	....	0.72	....	3.42	....	32.40	....
Gano ‡‡	1.85	−1.18	3.37	+0.61	1.83	−2.45	7.47	+2.62	0.23	−4.16	1.25	−3.41	1.91	−2.74	4.58	+0.92	5.71	+0.88	10.68	+7.57	0.76	−1.64	3.10	+1.35	42.48	−1
Goodland	1.86	−1.16	3.14	+0.04	2.23	−1.89	5.78	−0.33	0.44	−3.02	0.86	−2.67	1.55	−3.38	3.07	+0.09	4.76	−0.30	5.73	+1.91	0.42	−1.87	3.32	+1.14	33.16	−11.4
Hollister	1.30	....	2.20	....	4.00	....	2.75	....	1.55	....	0.70	....	4.55	....	7.35	....	2.20	....	1.20	....	0.45	....	2.45	....	30.70	....
Houston	1.10	−1.08	3.99	+1.51	2.11	−2.55	3.79	−0.97	0.24	−4.21	0.85	−4.16	0.96	−3.80	6.07	+2.53	8.36	+4.37	4.17	+1.70	0.72	−1.82	2.98	−0.86	35.34	−7
Ironton	2.27	−0.74	3.39	−0.08	2.31	−2.09	3.72	−0.66	0.51	−4.42	0.64	−4.44	0.85	−3.72	2.27	−1.16	5.40	+1.91	4.98	+2.31	1.16	−2.87	3.79	−0.78	31.29	−15
Koshkonong	1.59	−1.74	3.95	+0.84	3.25	−0.92	6.94	+2.04	3.78	−0.70	0.68	−3.71	1.69	−2.82	5.81	+2.23	5.51	+2.02	2.62	−0.09	0.75	−2.41	4.41	+1.42	40.98	−3
Lebanon	2.90	+0.41	3.04	+0.96	2.76	−1.10	6.63	+2.02	1.89	−4.19	2.24	−3.27	3.02	−1.66	3.62	+0.42	9.30	+5.47	5.83	+3.20	1.30	−1.24	3.62	+0.86	46.15	−1
Lockwood	1.49	+0.05	2.27	+0.07	3.39	+1.16	4.48	+1.08	3.00	−1.60	1.88	−2.71	4.25	+1.42	5.33	+1.33	3.70	+0.06	2.46	−0.60	0.57	−1.76	2.31	+0.37	35.13	−3
Mountain Grove	1.11	−1.53	1.62	−1.09	2.13	−2.25	4.08	−0.36	1.25	−3.03	1.81	−2.65	1.99	−2.69	4.21	+0.37	7.02	+3.04	4.05	+1.25	1.37	−0.80	3.31	+1.14	33.95	−8
Mount Vernon‡‡	1.55	−0.65	1.75	−1.09	3.12	−0.57	3.12	−0.34	3.77	−1.95	1.61	−3.71	2.90	−2.49	3.66	−0.44	5.46	+1.94	2.12	−1.20	0.30	−2.64	3.78	+1.16	33.14	−12
Neosho	1.79	−0.57	1.98	−0.54	4.08	+0.64	2.71	−1.52	4.08	−2.09	1.87	−3.66	6.35	+1.93	3.12	−0.96	4.13	+0.04	3.02	−0.16	0.31	−2.72	2.85	+0.21	36.29	−9
Rolla	1.22	−1.09	3.98	+1.54	4.04	+0.52	3.35	−1.02	0.83	−4.27	1.47	−2.82	2.85	−1.29	5.42	+1.70	6.18	+2.38	6.74	+4.30	1.43	−1.10	3.17	+0.78	40.69	[illegible]
Springfield	1.80	−0.86	2.26	−0.01	3.37	−0.70	3.63	−0.23	3.55	−2.00	1.48	−3.71	3.35	−1.44	4.70	+0.39	3.59	−0.17	2.84	+0.04	0.71	−1.93	2.90	−0.23	34.18	−10
Wheatland	2.00	+0.13	4.55	+2.54	1.90	−1.52	2.44	−2.40	0.16	−5.60	4.05	−1.14	3.37	−0.79	2.76	−0.51	5.52	+1.56	2.95	+0.44	0.90	−1.72	1.90	−0.37	32.50	−9
Southwest Plain.																										
Amoret	0.80	....	2.67	....	4.02	....	3.34	....	2.84	....	3.06	....	4.56	....	7.20	....	5.15	....	4.60	....	0.55	....	0.78	....	39.57	....
Appleton City	1.40	−0.89	2.57	+0.44	1.80	−1.28	1.75	−2.57	2.18	−4.05	5.00	−0.93	4.28	−1.24	2.45	−1.55	3.07	−0.42	5.25	+3.00	....	....	1.30	−0.54	....	....
Clinton	1.65	−0.39	3.55	+1.59	3.55	+0.98	3.12	−1.09	2.95	−2.71	4.28	−0.68	2.33	−2.26	4.85	+1.50	7.07	+3.66	6.47	+4.10	0.48	−1.45	1.77	−0.09	42.07	+2.1
Harrisonville	1.90	−0.55	2.47	+0.30	4.24	+1.70	3.09	−0.44	2.14	−2.56	4.22	−0.41	5.45	+1.55	6.22	+2.19	5.04	+1.76	3.79	+1.21	0.19	−1.78	1.28	−0.63	39.13	+1
Joplin	1.60	−0.56	2.95	+0.64	2.55	−0.22	3.12	−0.65	....	....	....	....	....	....	....	....	3.35	+0.10	....	....	....	....	....	....	....	....
Lamar	1.62	−0.08	2.50	+0.15	2.27	−0.57	3.91	−0.20	1.93	−3.77	1.30	−3.60	4.33	−0.13	6.57	+2.44	4.28	+0.15	2.30	−0.71	0.74	−1.40	1.96	−0.06	33.71	−7
Lamonte	1.15	−0.35	1.70	−0.32	3.28	+0.82	2.60	−1.03	1.90	−3.55	2.57	−2.23	3.50	−1.20	4.50	+1.02	9.86	+5.55	3.35	+1.25	T.	−1.94	2.12	+0.28	36.77	−1
Marshall	1.40	−0.41	2.71	+0.75	3.78	+1.20	2.53	−1.23	1.49	−3.51	1.92	−2.78	3.33	−1.10	3.44	−0.20	9.23	+4.82	7.69	+5.26	0.43	−1.65	1.79	−0.06	39.74	−1
Nevada	1.52	−0.06	2.67	+0.49	2.16	−0.91	1.99	−1.81	3.07	−2.61	3.45	−1.87	4.58	+0.70	3.35	−0.24	3.71	−0.54	5.59	+2.98	0.50	−1.43	1.32	−0.70	33.91	−6.0
Warrensburg	1.95	−0.16	2.71	+0.62	3.44	+1.05	3.16	+0.21	1.51	−3.39	3.34	−1.64	2.78	−1.46	4.11	+0.59	6.67	+3.49	6.18	+3.63	0.21	−1.54	1.77	−0.09	37.83	+1
Warsaw	1.29	−0.97	3.61	+0.63	2.10	−1.03	3.85	−0.56	2.54	−2.61	5.05	−0.23	7.61	+3.04	3.99	−0.29	5.64	+1.11	7.78	+4.58	1.15	−1.40	2.48	+0.58	47.09	+2
Northwest Plateau.																										
Avalon	1.08	−0.55	1.75	−0.49	3.75	+1.20	2.63	−1.31	0.55	−4.78	5.35	+0.29	1.77	−2.89	4.05	−0.09	9.53	+3.89	4.11	+0.69	0.32	−1.81	2.00	−0.23	36.81	−5
Bethany	....	....	....	....	....	....	....	....	....	....	4.94	+0.65	1.08	−3.62	1.95	−2.22	7.06	+3.42	2.56	+0.13	T.	−1.59	1.16	−0.40	....	....
Conception	0.35	−0.74	1.15	−0.08	3.46	+1.82	1.94	−0.87	0.91	−3.90	5.04	+0.28	0.96	−3.28	2.89	−0.99	10.38	+7.08	4.52	+2.08	T.	−1.33	1.17	+0.09	32.77	+0
Grant City	0.85	−0.11	0.80	−0.43	3.06	+0.98	2.18	−0.77	0.34	−4.64	3.57	−0.69	1.20	−3.82	2.78	−1.08	9.77	+5.98	3.27	+0.48	0.15	−1.26	1.13	−0.11	29.10	−5.4
Kansas City	0.28	−0.85	2.40	+0.81	3.02	+0.20	1.76	−1.53	0.70	−4.41	5.51	+0.85	2.81	−2.03	3.12	−1.63	16.17	+12.41	5.65	+3.44	0.26	−1.59	1.52	−0.16	43.20	+5
Kidder	0.20	−1.09	2.26	+0.67	1.48	−0.85	2.35	−0.73	1.02	−4.86	7.31	+2.86	1.49	−2.76	5.75	+1.71	10.44	+6.54	4.76	+2.04	0.14	−1.57	1.95	+0.48	39.21	+2.4
Lexington	1.10	−0.47	2.27	+0.17	4.08	+1.94	2.25	−1.03	0.62	−4.43	2.32	−2.75	5.74	+0.64	3.71	+0.47	9.50	+5.04	4.10	+1.52	0.29	−1.64	1.53	−0.24	37.51	−0
Liberty	0.65	−1.36	2.14	+0.80	3.70	+1.34	2.61	−0.57	0.95	−4.51	3.58	−1.63	3.82	−0.92	4.12	−0.14	12.94	+9.21	4.68	+2.49	0.17	−1.55	1.02	−0.40	40.08	+2.7
Maryville	0.45	−0.53	1.52	−0.29	3.46	+1.52	2.06	−1.12	0.64	−4.66	3.20	−1.81	2.85	−2.71	2.19	−2.27	9.09	+5.53	4.13	+1.72	0.15	−1.27	1.34	+0.15	31.28	−5.1
Oregon	0.26	−1.28	1.00	−0.69	3.30	+1.21	1.65	−1.75	1.16	−3.68	4.14	−0.76	2.29	−2.26	1.16	−3.14	8.62	+5.15	3.00	+0.36	0.06	−1.65	1.02	−0.72	27.64	−9
St. Joseph	0.25	−0.80	1.82	+0.64	1.69	−2.68	2.51	−0.59	0.55	−3.82	5.10	+0.31	1.38	−2.60	2.25	−1.60	6.21	+3.13	3.16	+0.57	0.10	−1.73	1.08	+0.05	29.45	−3.7
Tarkio	....	....	....	....	....	....	....	....	0.62	....	5.81	....	1.42	....	1.81	....	6.23	....	4.96	....	T.	....	0.57	....	....	....
Trenton	0.99	−0.46	1.69	−0.00	3.47	+1.27	2.81	−0.11	0.57	−4.73	2.20	−1.73	1.12	−2.85	3.54	−0.04	11.87	+8.11	5.48	+2.99	0.30	−1.40	1.34	−0.23	35.38	+0.9

Monthly and Annual Mean Temperatures for the Year 1914, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain																										
Brunswick	34.8	+ 6.3	25.3	− 3.1	42.0	+ 0.3	52.9	− 1.4	65.6	+ 1.9	78.0	+ 4.8	78.8	+ 1.9	76.9	+ 1.5	68.3	+ 0.1	59.2	+ 2.7	46.3	+ 4.6	22.6	− 9.4	54.2	+ 0.8
Columbia	37.7	+11.0	25.6	− 4.5	41.6	+ 0.2	51.2	− 0.1	66.9	+ 2.4	78.8	+ 4.3	80.0	+ 2.6	78.2	+ 3.5	69.0	+ 1.2	58.8	+ 4.0	48.1	+ 5.7	25.4	− 7.5	55.4	+ 1.9
Fayette	34.6	+ 6.7	22.4	− 6.7	39.8	− 2.7	52.2	− 2.9	65.2	+ 1.0	78.6	+ 5.4	80.0	+ 2.8	78.2	+ 2.2	67.9	− 0.9	57.6	+ 0.6	46.0	+ 3.2	21.6	10.7	53.7	− 0.2
Fulton	39.0[d]	+ 8.6	26.7	− 3.1	43.4	− 1.7	54.9	+ 0.9	65.8	+ 0.9	79.4[g]	+ 7.3	80.0	+ 3.3	78.8	+ 2.0	69.4	+ 0.2	58.9	+ 1.3	48.4	+ 3.4	26.8	6.4	56.0	+ 1.1
Hannibal	35.8	+ 9.1	23.0	− 6.1	40.6	− 1.0	53.6	0.0	66.7	+ 2.3	78.4	+ 5.1	80.0	+ 2.6	77.4	+ 2.4	68.0	+ 0.1	58.8	+ 2.9	46.2	+ 5.7	23.9	− 7.4	54.4	+ 1.3
Jefferson City	34.8	+ 4.4	24.8	− 6.0	40.6	− 2.9	53.3	− 3.9	65.8	+ 0.7	78.5	+ 4.5	80.4	+ 2.5	79.3	+ 2.6	70.0	+ 1.0	59.1	+ 2.4	48.0	+ 3.9	28.5	− 4.7	55.3	+ 0.4
Louisiana	35.4	+ 7.7	23.3	− 4.8	40.8	− 1.8	54.1	+ 0.7	64.8	+ 0.9	77.0	+ 5.4	....	....	77.6	+ 2.7	67.7	− 0.1	59.1	+ 3.3	47.2	+ 3.7	25.6	− 5.5	....	....
Macon	35.8	+ 2.8	24.2	− 1.6	40.7	− 0.6	53.2	− 0.8	66.2	+ 1.6	78.0	+ 5.0	79.8	+ 2.7	77.6	+ 0.2	67.2	− 0.9	59.1	+ 0.6	44.2	− 0.3	21.8	− 8.2	54.0	0.0
Mexico	34.1	+ 5.1	23.1	− 5.5	39.0	− 3.3	53.1	− 1.2	66.0	+ 1.8	79.5	+ 6.2	80.6	+ 3.7	77.6	+ 1.5	68.1	− 0.6	58.4	+ 1.8	46.0	+ 3.2	24.4	− 7.8	54.2	+ 0.4
Oakfield	39.3	+ 7.1	27.5	− 4.2	43.8	− 1.9	55.8	− 0.2	68.2	+ 2.2	80.8	+ 7.0	82.6	+ 5.1	79.4	+ 2.5	69.4	− 1.2	60.3	+ 1.5	49.9	+ 4.3	28.0	− 6.8	57.1	+ 1.3
Palmyra	35.3	....	23.0	....	39.2	....	52.7	....	66.2	....	80.2	....	81.6	....	78.1	....	66.8	....	56.8	....	43.8	....	21.5	....	53.8	....
St. Catherine	35.3	....	23.4	....	40.6	....	52.6	....	66.1	....	77.5	....	79.4	....	77.0	....	67.2	....	57.9	....	45.7	....	22.0	....	53.7	....
St. Charles	38.6	+ 7.4	25.6	− 5.9	43.8	− 0.2	56.0	+ 0.6	67.5	+ 6.1	79.9	+ 6.3	82.6	+ 5.2	79.2	+ 2.8	69.3	+ 2.9	60.2	+ 2.5	48.5	+ 3.8	28.0	− 6.8	56.6	+ 2.1
St. Louis (1)	39.7	+ 8.7	27.4	− 6.1	43.5	0.0	56.4	+ 0.3	69.4	+ 2.9	81.1	+ 6.0	83.1	+ 4.0	78.9	+ 1.7	69.6	− 0.4	60.8	+ 2.4	50.3	+ 6.9	28.6	− 6.9	57.4	+ 1.6
St. Louis (2)	38.7	....	26.2	....	42.7	....	55.6	....	68.9	....	81.2	....	83.1	....	79.2	....	69.4	....	60.3	....	49.3	....	27.5	....	56.8	....
Steffenville	35.8	+ 7.6	23.9	− 2.9	41.1	− 0.7	54.1	+ 1.5	67.8	+ 3.6	79.8	+ 7.4	82.6	+ 5.6	81.1	+ 4.5	69.8	+ 1.3	60.3	+ 3.4	46.7	+ 3.2	23.0	− 7.8	55.5	+ 2.2
Sublett	35.5	+ 9.0	21.9	− 2.9	39.1	− 0.1	52.3	+ 0.7	64.9	+ 2.3	....	....	79.8	+ 7.9	....	....	....	....	....	....	....	....	....	....	....	....
Unionville	30.0	+ 6.7	20.4	− 3.6	36.8	− 1.0	50.0	− 0.9	62.8	0.0	74.8	+ 2.6	78.2	+ 1.3	74.0	− 1.7	65.5	− 1.9	59.1	+ 4.0	43.2	+ 3.5	16.4	−11.6	50.9	0.2
Vandalia	36.3	....	25.0	....	42.0	....	55.6	....	68.2	....	80.6	....	81.6	....	78.8	....	68.6	....	58.7	....	47.4	....	25.8	....	55.7	....
Warrenton	34.8	+ 5.3	23.9	− 5.5	41.3	− 0.7	54.6	− 0.2	67.5	+ 2.9	79.9	+ 6.6	81.6	+ 4.3	78.4	+ 1.8	68.6	− 0.1	58.4	+ 2.9	46.2	+ 3.5	25.0	− 7.2	55.0	+ 1.1
Southeast Lowlands																										
Cardwell	45.0[h]	....	38.4	....	47.8	....	60.4	....	69.5	....	81.4	....	82.4	....	78.8[d]	....	71.3	....	62.2	....	50.0	....	34.7	....	60.2	....
Caruthersville	44.6	+ 5.6	38.4	+ 1.0	47.4	− 3.9	60.4	+ 0.8	71.1	+ 2.2	84.0	+ 7.2	84.6	+ 5.0	79.8	+ 0.7	73.6	+ 0.6	63.0	+ 2.6	51.4	+ 2.1	35.6	− 4.3	61.2	+ 1.6
Doniphan	41.0	+ 3.5	34.4	− 2.5	45.2	− 4.8	58.0	+ 0.4	68.2	+ 1.6	81.2	+ 7.0	82.1	+ 4.7	78.7	+ 1.3	69.2	− 2.3	59.0	+ 1.5	48.0	+ 0.3	31.8	− 5.6	58.1	+ 0.4
Jackson	39.8	+ 5.5	34.4	− 0.4	45.2	− 2.2	57.7	+ 1.2	68.2	+ 2.8	80.9	+ 7.1	83.6	+ 7.1	79.1	+ 3.3	72.2	+ 2.4	62.4	+ 5.3	52.8	+ 6.9	32.0	− 4.5	59.0	+ 2.9
Marble Hill	41.2	+ 6.8	31.8	− 2.9	42.6	− 4.9	57.4	+ 1.3	68.8	+ 2.9	80.8	+ 6.9	79.4	+ 2.5	....	....	70.5	− 0.2	59.6	+ 2.1	48.7	+ 3.2	31.4	− 4.6	....	....
Poplar Bluff	....	....	....	....	....	....	....	....	....	....	....	....	....	....	78.3[n]	....	70.6	− 1.4	61.4	+ 1.4	49.5	+ 2.5	31.0	− 6.6	....	....
Sikeston	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	70.4[i]	− 0.3	62.0	+ 2.6	....	....	32.9	− 5.4	....	....
Cairo, Ill.	41.6	+ 6.8	33.4	− 4.2	44.6	− 2.4	58.0	− 0.3	69.2	+ 1.7	81.7	+ 6.5	83.2	+ 4.6	78.0	+ 1.0	70.7	+ 0.5	61.5	+ 2.4	51.1	+ 4.2	32.4	− 6.1	58.8	+ 1.2
Ozark Plateau																										
Belle	38.8	+ 6.8	28.5	− 3.4	48.2[m]	+ 3.1	56.7[g]	+ 2.1	66.8[g]	+ 1.7	80.4	+ 7.6	81.4	+ 4.3	79.4[p]	+ 1.9	....	....	60.4[e]	+ 0.9	51.4	+ 5.6	29.7[h]	− 5.0	....	....
Birch tree	39.4	+ 4.7	32.3	− 1.7	44.6	− 3.2	55.2	− 1.8	66.4	+ 1.1	....	....	80.3	+ 7.6	76.7	+ 0.6	69.1[f]	− 0.8	58.6[d]	+ 0.6	49.4	+ 3.2	29.6	− 6.4	....	....
Bolivar	40.6	+ 6.1	32.8	− 0.7	46.8	+ 0.3	56.8	+ 0.7	67.4	+ 1.8	79.3	+ 6.6	79.0	+ 2.1	75.6	− 1.6	....	....	59.2	+ 0.8	50.0	+ 3.2	28.9	− 7.3	....	....
Cassville	38.4	....	34.8	....	44.4	....	54.9	....	64.4	....	76.2	....	77.6	....	75.8	....	70.2	....	58.6	....	47.4	....	30.6	....	56.1	....
Crocker	40.5	....	31.9	....	45.4[h]	....	56.6	....	68.0	....	81.7	....	....	....	79.9	....	68.6	....	57.0	....	50.6	....	27.6	....	....	....
Dean	40.8[d]	+ 3.7	34.8	− 1.1	45.9[d]	− 3.7	56.7	− 0.7	64.8	− 1.4	78.3	+ 5.3	78.0[h]	+ 0.3	75.8	− 2.3	71.6[d]	+ 0.3	59.0	− 1.2	52.0[f]	+ 2.4	31.0	− 7.1	57.4	− 0.5
Duncan	39.6	....	30.9	....	44.0	....	55.0	....	65.9	....	78.4	....	78.6	....	76.0	....	69.2	....	57.0	....	48.8	....	27.2	....	55.9	....
Eldon	39.0	....	28.7	....	44.2	....	55.3	....	67.2	....	79.3	....	81.0	....	78.6	....	70.0	....	58.6	....	49.0	....	25.9	....	56.4	....
Fruit City	38.8	....	32.2	....	44.6	....	55.0	....	66.0	....	78.5	....	80.1	....	76.6	....	68.0	....	61.2	....	50.8	....	30.4	....	56.8	....
Gano	39.2	+ 5.4	29.6	− 4.6	44.8	− 3.1	56.5	+ 0.6	67.2	+ 1.4	80.0	+ 7.4	81.8	+ 5.4	77.8	+ 0.9	69.4	− 1.1	58.4	+ 0.6	50.8	+ 3.8	28.8	− 7.5	57.0	− 0.8
Goodland	38.4	+ 4.4	29.8	− 3.2	42.0	− 4.1	54.1	− 0.4	64.3	+ 0.9	76.8	+ 5.7	....	....	75.6[g]	+ 1.0	67.6	− 0.9	56.8	+ 1.1	47.3	+ 1.6	29.1	− 5.7	....	....
Hollister	42.6	....	34.8	....	46.4	....	57.6	....	67.0	....	80.7	....	78.0	....	77.8	....	70.6	....	57.0	....	50.0	....	32.5	....	57.9	....
Houston	39.7	+ 5.7	30.2	− 3.1	41.0	− 5.8	57.6[g]	+ 2.0	67.0	+ 2.2	78.8[i]	+ 6.9	79.6	+ 3.8	76.6	+ 1.4	68.8	0.0	57.9	+ 0.9	50.1	+ 4.2	29.6	− 6.6	56.4	+ 1.0
Ironton	39.2	+ 6.9	30.4	− 3.0	42.6	− 2.5	56.2	+ 0.8	65.8	+ 1.2	78.6	+ 6.6	80.6	+ 5.0	77.8	+ 3.5	68.4	+ 0.7	57.4	+ 1.5	48.0	+ 4.6	29.5	− 4.8	56.2	+ 1.7
Koshkonong	41.6	+ 4.8	34.2	− 2.2	46.1	− 4.2	59.0	+ 1.6	69.1	+ 2.7	81.9	+ 8.2	82.9	+ 5.2	80.1	+ 2.7	72.0	+ 1.0	60.0	+ 0.4	52.4	+ 3.1	31.5	− 6.3	59.3	+ 1.4
Lebanon	39.6	+ 6.0	31.8	− 1.9	46.4	+ 0.3	55.8	− 0.5	67.4	+ 1.6	80.6	+ 5.6	80.0	+ 3.4	78.2	+ 1.8	70.3	+ 0.3	60.8[g]	+ 2.3	50.1	+ 4.1	26.2	− 9.2	57.3	+ 1.2
Lockwood	40.3	....	32.0	....	46.4	....	56.6	....	65.6[h]	....	80.0	....	79.7	+ 3.1	78.0	....	70.8	....	58.2	....	50.4	....	28.8	....	57.2	....
Mountaingrove	38.4	+ 4.5	31.0	− 2.3	44.4	− 2.7	54.8	+ 0.3	66.0	+ 1.7	79.1	+ 7.9	79.7	+ 3.9	76.4	+ 1.0	69.2	+ 0.3	57.4	− 0.1	48.0	+ 0.9	27.4	− 7.8	56.0	− 0.6
Mount Vernon	40.8[g]	+ 6.1	31.8	− 1.6	45.3	− 1.1	54.6	− 1.2	66.0	− 0.1	79.0	+ 5.6	79.7	+ 1.9	77.9	0.0	70.6	− 0.9	58.4	− 0.8	51.0	+ 3.8	29.6	− 7.4	57.1	+ 0.4
Neosho	42.2	+ 7.1	35.8	− 0.1	47.6	− 0.8	57.6	− 0.6	66.4	+ 0.2	79.4	+ 5.7	79.7	+ 2.3	77.8	+ 0.9	72.6	+ 2.2	60.0	+ 0.8	50.7	+ 3.8	31.6	− 4.9	58.4	+ 1.4
Rolla	38.2	+ 7.0	30.4	− 5.2	44.1	− 0.8	56.2	+ 1.2	67.8	+ 3.4	80.4	+ 8.1	80.8	+ 3.8	78.0	+ 2.4	68.7	+ 1.1	58.6	+ 3.9	48.5	+ 4.6	26.8	− 7.0	56.5	+ 1.9
Springfield	39.5	+ 8.2	31.2	− 2.4	44.0	+ 0.5	54.8	− 0.9	65.6	+ 1.0	78.8	+ 6.5	78.8	+ 2.4	76.4	+ 1.6	70.6	+ 2.8	58.8	+ 1.5	50.6	+ 6.2	27.4	− 8.1	56.4	+ 1.6
Southwest Lowlands																										
Amoret	38.8	....	29.6	....	46.2	....	57.0	....	66.6	....	80.7	....	81.1	....	78.1	....	72.0	....	60.2	....	50.8	....	26.7	....	57.3	....
Appleton City	38.4	+ 6.9	....	....	....	....	54.6	− 1.5	64.4	− 0.9	78.4	+ 4.0	78.4	+ 0.4	77.0	− 0.6	70.2	− 0.6	59.6	+ 0.6	47.6	+ 2.4	28.5[c]	− 6.0	....	....
Clinton	38.6	....	30.1	....	46.2	....	56.0	....	66.2	....	79.9	....	80.1	....	79.5	....	72.8	....	60.2	....	49.6	....	27.3	....	57.2	....
Harrisonville	35.0	+ 7.7	26.0	− 3.5	42.5	+ 2.0	53.6	− 0.4	65.6	+ 1.8	78.8	+ 5.6	79.6	+ 2.2	78.0	+ 2.7	69.9	+ 1.6	58.2	+ 2.3	46.8	+ 4.8	23.2	− 8.0	54.8	+ 1.6
Joplin	43.2	+ 6.8	36.5	+ 0.1	50.4	− 0.3	59.0	+ 0.5	....	....	....	....	....	....	....	....	73.4	+ 1.2	....	....	....	....	....	....	....	....
Lamar	38.4	+ 5.7	31.5	− 2.6	45.4	− 1.3	56.0	− 0.9	66.2	+ 0.5	81.8	+ 7.9	81.4	+ 3.3	78.9	+ 1.7	73.2	+ 2.8	60.3	+ 1.6	49.6	+ 3.3	28.0	− 7.4	57.6	+ 1.2
Lamonte	37.0	....	25.9	....	43.2	....	54.3	....	67.2	....	78.8	....	79.6	....	76.8	....	69.9	....	60.0	....	46.6	....	25.6	....	55.4	....
Marshall	36.9	+ 8.7	25.9	− 2.8	42.4	0.0	54.6	+ 0.6	66.0	+ 1.8	78.4	+ 5.6	79.6	+ 2.8	78.4	+ 2.4	69.6	+ 1.0	58.6	+ 1.7	48.0	+ 5.3	24.0	− 7.2	55.2	+ 1.7
Warrensburg	37.7	+ 9.1	27.4	− 3.5	44.4	+ 1.1	55.8	− 0.2	68.0	+ 2.6	80.2	+ 6.2	81.0	+ 2.4	79.3	+ 2.2	71.4	+ 1.5	60.2	+ 2.2	50.0	+ 5.4	25.2	− 8.8	56.7	+ 1.7
Warsaw	40.0	+ 6.4	30.8	− 2.8	45.8	− 1.6	57.2	+ 1.5	68.4	+ 2.5	81.3	+ 7.7	80.6	+ 2.6	78.0	− 0.2	71.1	− 0.3	60.0	+ 2.1	51.0	+ 3.9	27.8	− 8.1	57.7	+ 1.1
Northwest Plateau																										
Avalon	36.2	+ 8.8	25.3	− 1.7	41.8	− 0.1	54.2	+ 1.4	67.2	+ 3.1	79.4	+ 6.9	80.9	+ 3.7	78.5	+ 1.4	70.2	+ 1.2	59.6	+ 2.1	48.2	+ 4.5	22.6	− 8.2	55.3	+ 1.9
Bethany	....	....	....	....	....	....	....	....	....	....	76.9[g]	+ 4.9	80.6	+ 5.4	78.4	+ 4.1	69.9	+ 3.4	59.0	+ 5.2	45.2	+ 1.8	19.4	−12.6	....	....
Conception	32.6	+ 7.6	22.6[f]	− 3.5	38.6	− 0.4	52.0	− 0.0	64.5	+ 3.4	75.8	+ 5.1	79.2	+ 3.6	77.2	+ 3.3	67.6	+ 0.8	57.4	+ 1.9	46.2	+ 5.3	19.6	−10.2	52.8	+ 1.4
Grant City	31.6	+ 7.4	22.0	− 4.3	39.0	− 1.7	52.6	+ 1.0	65.1	+ 3.1	77.3	+ 6.7	80.6	+ 5.0	78.2	+ 3.0	67.8	+ 1.0	58.2	+ 3.4	46.6	+ 4.3	19.3	− 9.3	53.2	+ 1.6
Kansas City	36.4	+10.2	26.8	− 3.1	43.2	+ 2.4	55.2	+ 0.9	66.8	+ 2.3	78.4	+ 5.4	80.8	+ 3.2	78.0	+ 2.2	70.4	+ 2.9	60.0	+ 4.2	50.2	+ 8.7	24.2	− 7.3	55.9	+ 2.7
Kidder	33.1	+ 6.9	24.0	− 2.4	40.0	− 0.8	52.4	− 0.2	66.5	+ 3.5	78.0	+ 5.8	80.1	+ 3.6	78.8	+ 3.7	69.2	+ 1.8	59.4	+ 3.3	47.3	+ 5.9	23.1	− 6.3	54.3	+ 2.1
Lexington	34.6	+ 7.1	25.6	− 3.0	42.4	− 0.7	54.4	+ 0.2	66.8	+ 2.8	79.0	+ 6.8	79.5	+ 3.0	77.2	+ 1.6	69.7	+ 1.4	59.4	+ 1.8	48.8	+ 5.3	24.0	− 7.3	55.1	+ 1.6
Liberty	37.0	+ 8.3	28.0	− 0.9	44.8	+ 2.3	55.9	+ 0.9	67.7	+ 3.7	78.6	+ 5.3	80.9	+ 3.6	78.4	+ 2.1	71.8	+ 2.7	59.6[d]	+ 2.4	49.0[e]	+ 6.1	23.8	− 7.8	56.3	+ 2.4
Maryville	30.0	+ 7.6	19.8	− 3.3	37.2	+ 0.1	51.4	+ 0.5	65.1	+ 2.9	76.6	+ 5.7	79.8	+ 3.9	78.0	+ 3.1	67.8	+ 1.9	56.2	+ 2.9	43.4	+ 4.4	18.3	− 8.4	52.0	+ 1.8
Oregon	33.6	+10.0	24.6	− 3.4	39.6	+ 0.8	53.2	+ 0.7	64.6	+ 1.3	76.7	+ 4.4	79.4	+ 2.6	77.8	+ 2.7	68.2	+ 1.2	57.7	+ 2.8	47.6	+ 7.0	22.6	− 6.0	53.8	+ 2.0
St Joseph	33.9	....	24.6	....	40.6	....	54.1	....	66.2	....	78.2	....	80.8	....	79.0	....	69.9	....	58.8	....	48.4	....	21.6	....	54.7	....
Tarkio	....	....	....	....	....	....	....	....	64.4	....	76.2	....	79.6	....	78.8	....	68.8	....	57.5	....	46.2	....	19.0	....	....	....
Trenton	34.5	+ 7.9	23.2	− 4.3	40.4	− 0.1	53.0	+ 0.2	66.8	+ 2.9	78.4	+ 6.2	81.0	+ 4.6	77.2	+ 1.9	68.2	+ 0.8	57.9	+ 2.1	46.5	+ 4.4	22.0	− 8.1	54.1	+ 1.5

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[a], [b], [c], etc., indicate number of days missing from monthly reports, as, [a], 1; [b], 2; [c], 3, etc.

Monthly Maximum Temperatures for the Year 1914, with Dates

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date
Northeast Plain.																								
Brunswick	65	28	57	2	79	15	85	26	90	25	97	9†	98	27	95	7†	91	5	81	1†	81	6	47	1†
Columbia	66	19	55	2	79	15	86	26	91	26	98	26	100	16	97	8	94	1	81	6	80	6	55	1
Fayette	63	28	53	2	76	15	84	26	88	24†	98	9†	102	16	98	7	90	1†	80	1†	79	6	51	1
Fulton	68	27	58	17	80	15	85	16†	92	31	100	22†	103	27	103	7	94	1	87	6	84	2†	59	1
Hannibal	64	29	53	2	76	26	86	26	91	27	99	26	101	11	97	18	91	1	83	6	80	6	58	1
Jefferson City	70	27	60	17	80	15	85	16†	93	26	103	10	106	26	101	7	95	1	86	6	80	6	60	1
Louisiana	66	27	54	2	75	14†	88	26	92	26†	100	25	104	16	102	6	90	1	86	6	79	3†	59	1
Macon	61	27	53	2	75	15	85	26	91	27	98	26	99	10†	99	7	90	1†	83	1	79	6	53	1
Mexico	65	27	56	2	78	15	88	26	94	26	103	25†	103	27	101	18	94	1	87	6	81	3†	58	1
Oakfield	69	27	62	17	80	15	85	26	93	26	104	26	106	11	102	6	93	1	85	6†	82	6	58	1
Palmyra	63	29	51	3†	75	27	87	26	93	24†	103	21†	106	11	100	18	92	1	84	7	77	6	57	1
St. Catharine	59	28	52	2	75	15	81	26	89	25	96	26	99	16	95	18	86	5	78	1	76	6	56	1
St. Charles	69	27	61	17	80	15	87	26	91	25†	102	19†	107	11	101	7	91	1	81	6	81	7	57	1
St. Louis(1)	68	28	62	17	80	15	82	16	92	27	101	26	102	11	98	6	89	6	82	6	80	6	60	1
St. Louis(2)	69	27	62	17	80	15	83	16	92	11	102	26	104	11	99	6	90	1	83	6	81	6	57	1
Steffenville	65	27	54	2	76	16	91	26	96	27	103	25†	105	27	106	7	94	6	85	2†	81	6	59	1
Sublett	60	28†	50	2	74	15	85	27	92	26†	....	....	105	11	....	....	....	....	....	....	....	....	....	....
Unionville	60	19	56	17	75	15	84	26	90	25†	96	25	103	12	97	18	85	5	81	1†	78	5	48	1
Vandalia	61	28†	48	2	74	26	90	27	96	31	104	26	104	11†	101	8†	90	19	84	7	76	3	57	1
Warrenton	68	27	61	17	80	15	86	16†	93	26†	103	26	104	11†	103	6	94	1	84	5	80	6	57	1
Southeast Lowlands.																								
Cardwell	74	28	75	26	78	14	87	16	95	27	102	10	105	16	96	5†	96	1†	81	5†	83	3	64	1
Caruthersville	75	29	70	17	81	15	88	17	97	31	106	25	104	27	98	22	95	6	86	1†	81	2†	60	1
Doniphan	69	28	65	17	75	15	84	16	93	31	104	26	104	15†	100	6	92	6	81	6†	80	6	68	2
Jackson	68	27	60	16†	77	15	88	16	95	31	103	26	108	16	100	6	96	6†	85	5†	83	7	63	1
Marble Hill	69	28	63	17	78	15	87	23	93	26†	106	23	101	2†	....	....	95	1	83	6	82	3†	64	1
Poplar Bluff	....	....	....	....	....	....	....	....	....	....	....	....	....	....	100	21	95	6	85	7†	83	3	60	1
Sikeston	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	92	21	84	6	....	....	....	....
Cairo, Ill.	69	28	64	17	76	15	83	17	92	29	100	27	101	12	97	2	91	6	84	6	86	7	60	2
Ozark Plateau.																								
Belle	69	27	59	17	86	29	86	16	90	26	102	25	106	15	101	6	....	....	87	6	82	2†	60	1
Birchtree	65	27†	67	17	79	15	86	25	90	31	....	....	103	16	97	6†	90	6	80	6†	81	3	58	1
Bolivar	71	19	62	17	81	15	87	26	92	31	101	11	100	28	102	7	....	....	84	6	78	2†	59	1
Cassville	72	27	64	17	80	27	84	16†	88	31	97	11†	100	28	94	6†	91	1†	87	6	83	3	61	1†
Crocker	78	8	62	17	....	....	83	26	93	25†	102	26	....	....	101	3	93	1	79	7	89	7	50	1
Dean	73	28	65	17	80	15†	87	16	88	26	99	19	98	28	96	6	96	8	85	7	82	4†	61	1
Duncan	68	8†	62	17	79	15	83	26	95	29	100	11†	103	15†	99	6	91	1	83	6	80	5	57	1
Eldon	69	27	60	17	79	15	85	16†	91	26†	100	9†	106	28	102	7	95	1	85	6	81	3	56	1
Fruit City	66	27	66	17	79	15	84	16	93	31	99	10†	101	16†	98	5†	91	1	82	6	81	2†	58	1
Gano	69	28	63	17	83	15	86	16	93	26	103	10	106	16	101	2	93	1	86	6	82	6	60	1†
Goodland	67	28	65	17	80	15	86	16	93	31	100	10†	....	....	98	18†	92	1	82	8	81	2†	59	1
Hollister	78	28	64	17†	84	15	88	16†	89	26	100	25†	98	28	97	19	94	1	86	8	82	3†	58	2
Houston	67	28	64	17	80	15	83	16	91	31	100	19	103	16	96	6†	90	1	81	8	78	6	59	1
Ironton	68	28	65	17	80	15	85	16	94	26	103	10	107	16	101	2	95	1	83	6†	80	3†	62	1
Koshkonong	69	28	68	17	80	15	85	16	90	26†	101	11	104	16†	98	5	92	6	83	6	80	2†	61	1
Lebanon	68	19†	63	17	82	14	85	26	92	31	101	20	106	28	99	7	94	1	84	6†	84	3	62	1
Lockwood	66	27	58	22	78	15†	85	16	87	10†	100	19	99	15†	98	6	91	1†	82	8	79	2†	57	1†
Mountain Grove	66	27†	64	17	79	15	84	21	89	26	99	11	102	16	95	6†	89	1†	81	8	79	3	56	1
Mount Vernon	69	27†	63	17	78	14†	84	17	87	31	99	10†	103	28	99	6	91	1	83	6	82	3	65	1
Neosho	71	27	67	17	80	15	87	16	89	26†	98	28	98	28	96	20†	92	1†	85	7†	81	3†	62	1
Rolla	70	27	61	17	80	15	85	16	93	26	102	24†	104	16	100	2	91	1	84	8	81	3	60	1
Springfield	68	8	62	17	77	15	82	16	87	31	97	19	97	15	92	6	89	1	82	8	76	2	56	1
Southwest Plain.																								
Amoret	66	19	60	2	82	16	89	25	91	26	101	26	102	16	101	7	94	1	84	6†	81	2†	59	1†
Appleton City	69	20	....	....	78	16	84	23	92	23	97	20	97	10†	98	7	91	5	82	2†	80	3†	60	1
Clinton	66	26†	65	1†	80	15	87	25	91	26	103	20	102	28	102	7	93	1†	88	1†	83	4	50	1
Harrisonville	66	19	57	2	83	15	86	25	91	31	99	9†	102	16	101	7	93	5	88	2	80	6	52	1
Joplin	68	15†	65	17†	87	15	88	16	....	....	....	....	....	....	....	....	96	16	....	....	....	....	....	....
Lamar	67	26†	63	17	82	15	86	16	89	26†	102	19†	104	28	101	7	95	5†	86	8	81	6	54	1
Lamonte	65	28	56	2	77	15†	85	26	91	25†	99	25†	101	16	99	7	92	1†	84	4	80	1	60	1
Marshall	64	19†	55	2	76	15	85	26	90	25†	99	9	103	16	99	7†	92	1†	82	1†	78	2†	51	1
Warrensburg	67	19	58	2	80	15	86	16	93	26†	101	10†	104	16	102	7	94	5	84	1	83	3	58	1
Warsaw	70	19†	65	17	85	15	89	16	95	31	102	20	104	28	101	22	95	1†	87	7	87	7	64	1
Northwest Plateau.																								
Avalon	64	19	55	2	79	15	84	16	91	31	100	9†	105	16	100	7†	92	1	84	1	80	6	58	1
Bethany	....	....	....	....	....	....	....	....	....	....	97	9	101	27	99	7	95	5	82	1†	80	6	56	1
Conception	60	19	53	2†	77	15	82	16	90	26	94	10†	100	12	98	7†	95	5	79	6	80	6	52	1
Grant City	60	19	52	2†	77	15	82	21†	98	26	100	24	109	12	104	18	95	5	82	2	80	6	50	1
Kansas City	65	19	56	17	82	15	83	21	88	26	96	26	101	16	98	7	94	5	80	6	80	6	54	1
Kidder	64	19	53	17	77	15	83	21	90	26†	97	9	100	27	100	7	92	5	81	1	79	2	51	1
Lexington	62	28	54	2	79	15	85	25†	90	26	98	9	100	16	96	7	92	5	82	1	81	6	52	1
Liberty	63	19	58	17	84	15	86	16†	92	26	98	9†	104	16	100	7	95	5†	85	5	83	3	59	1
Maryville	60	19	54	17	77	15	85	16†	96	26	98	24†	106	12	102	18†	99	5	82	7	80	6	50	1
Oregon	61	19	53	17	77	15	90	17	88	25†	95	20†	100	16	99	7†	96	5	78	6	79	6	60	1
St Joseph	63	19	54	17	78	15	85	21	92	26	97	20	102	16	99	7	95	5	82	6	81	2	52	1
Tarkio	....	....	....	....	....	....	....	....	90	25†	95	24	104	12	102	22	99	5	81	6	79	2†	50	1
Trenton	58	27	51	2	72	15	82	26	91	26	97	26	100	16	95	18	90	5	79	7	76	6	55	1

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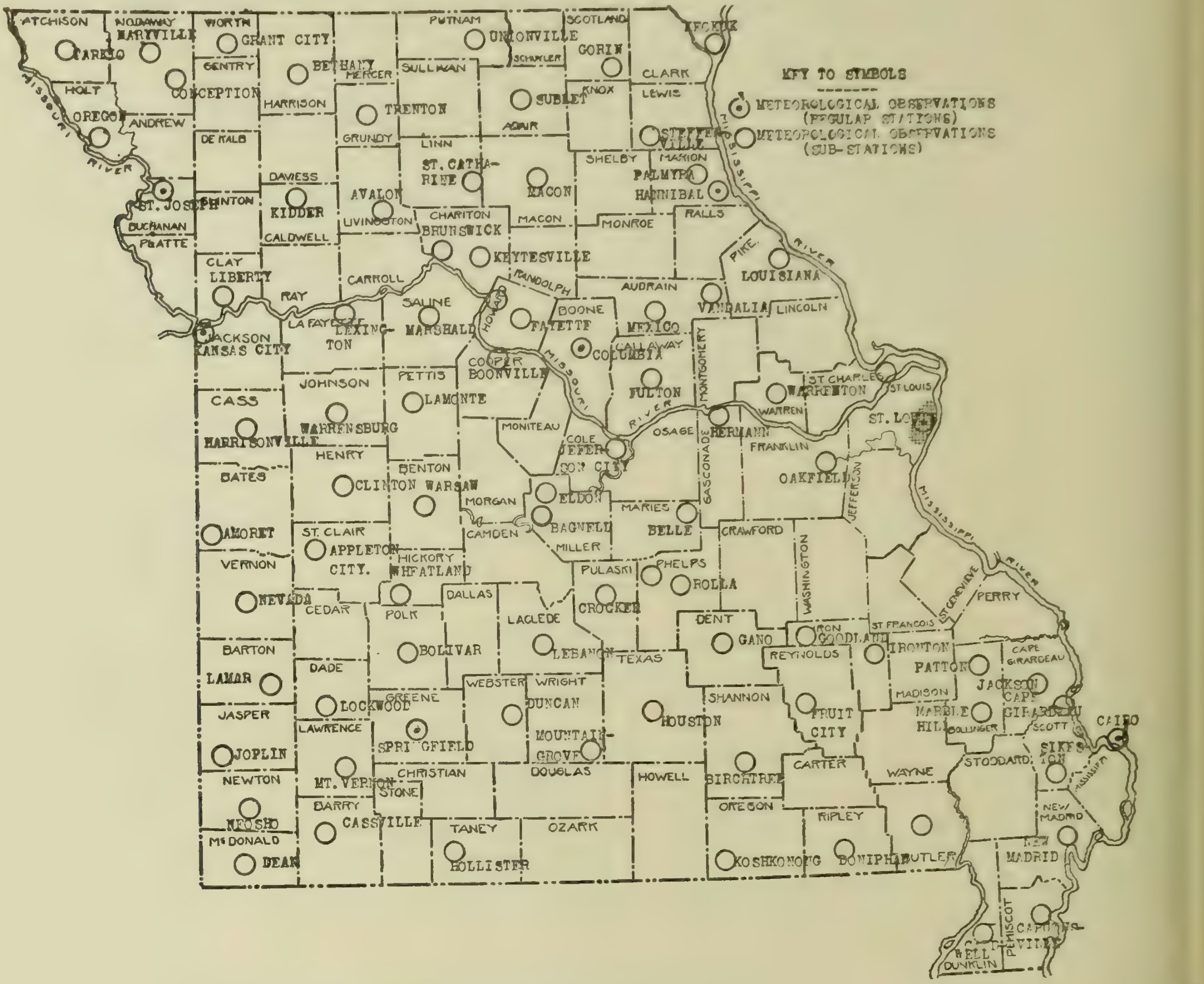
† Also on other dates.

Monthly Minimum Temperatures for the Year 1914, with Dates

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
Northeast Plain.																								
runswick	9	12†	− 5	7†	13	20	25	9†	41	9	52	17	61	2	57	29	46	26	26	27†	7	19†	−10	26
lumbia	11	12	− 3	7	8	20	24	9	40	9	50	17	59	20	60	15	44	23	25	27	9	19	− 6	26
ayette	8	12	− 8	7	9	20	23	9	40	9	52	17	61	20†	58	28	45	23	26	27	6	19	−11	26
ulton	12	12†	− 2	7	8	20	23	9	35	9	52	18	56	20	54	12	40	26†	23	27	10	19	− 6	26
annibal	7	12	− 4	25	10	1	24	9	40	1	53	20	56	19	56	15	44	23	26	27	8	19	− 8	26
efferson City	10	13	− 4	7†	9	20	22	9	35	9	50	17	58	2†	53	11	45	26	28	27†	11	20	− 3	14†
ouisiana	7	12	− 7	25	− 2	4	21	9	33	1†	43	17	54	20	52	11†	38	26	24	27	11	18†	−14	26
acon	5	12	− 7	7	11	1	24	9	41	8†	51	17†	56	30	56	29	45	23†	24	27	6	19†	−14	26
exico	9	13	− 4	7†	9	1†	24	9†	38	1	49	17	58	20†	55	11	44	26†	24	27	8	20	− 9	26†
akfield‡‡	13	12†	− 1	7	13	2†	22	9	42	1†	55	16†	61	2	60	26	46	25	24	27	11	19†	− 1	14†
almyra	6	12	− 7	25	11	20	24	9	36	1	51	17	57	19	54	12	41	26	24	27	7	19	−14	26
t. Catharine	6	12	− 9	7	12	1	22	9	40	9	50	17	57	19	55	28	46	23†	24	27	6	19	−12	26
t. Charles	13	12†	0	7†	13	2†	22	9	42	1†	54	17†	62	2†	59	26	45	25	27	27	12	19†	− 1	15
t. Louis (1)	15	12	1	7	16	1	26	9	44	1	57	20	65	30	63	29	52	25	31	27	13	19	2	26
t. Louis (2)	14	12	1	7	15	1	27	9	44	1	58	16†	64	1	63	26†	51	23†	31	27	13	19†	2	14†
teffenville	5	12	− 5	7	10	1	24	9	37	1	48	17	54	19	54	11	41	26	21	27	7	19	−18	26
ldett ‡‡	3	12	− 8	7	9	1	21	9	36	8†	.....	.....	52	19†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
nionville	1	13	− 9	8	6	2	22	9	36	15	43	17	52	18	49	11	41	25	20	27	2	20	−16	26
andalia	13	12	− 1	7	10	4	26	9	39	4	53	17	51	19	58	16	46	23†	27	27	10	19	− 6	26
arrenton	11	13	− 3	7†	13	2	22	9	40	13	53	17	60	30	58	20	45	25	24	27	10	20	− 5	26
Southeast Lowlands.																								
ardwell	20	13	10	6	16	19	27	9	43	9	62	2	53	20	60	16†	42	24†	25	28	14	20	2	15
aruthersville	20	13	11	7	19	2	29	9†	44	14	61	18	64	30	62	16†	46	24	31	28	13	20	5	15
oniphan	16	13	6	7	9	20	24	9	39	9	57	18	56	30	59	16	41	27	25	28	10	20	− 8	15
ackson	15	13	6	24	15	20	26	9	40	1†	58	16†	58	20†	60	4†	41	27	28	27	10	20	−11	15
arble Hill	11	13	1	24	8	20	20	8	40	12	57	30	53	5	.....	.....	41	27	29	28	10	20	−10	15
oplar Bluff	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59	16	44	24	27	28	10	19	− 6	15
reston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	27	30	27†	.....	.....	2	15
airo, Ill.	18	13	9	7	18	2	29	9	44	1	62	16	64	19	64	30	50	27	32	27	11	20	4	15
Ozark Plateau.																								
elle	10	30	− 1	7	.....	.....	24	9	39	10	50	19	58	20	55	5	.....	.....	26	27	11	20	1	26
rch tree	16	13	2	7	9	20	23	9	39	9	.....	.....	57	30	61	8†	44	27	27	27	8	20	− 8	15
olivar	10	30	− 1	7	4	20	22	9	37	9†	54	16	59	30	51	29	.....	.....	24	27	12	19†	− 4	15
assville	3	30	0	7	10	20	19	9	31	9	49	28	60	19	54	29	35	26	23	27	10	20	− 7	15
rocker	13	30†	− 2	7	.....	.....	22	9	40	8†	57	17	.....	.....	62	14†	45	25†	25	27	10	20	− 4	14†
ean ‡‡	− 1	31	− 2	7	12	12	19	9	34	13†	53	28	61	20	52	29	39	26	25	27	12	19	2	14†
uncan	12	30	− 2	7	9	20	22	9	36	9	54	16†	56	30	57	8	41	26	24	27	6	20	− 6	15
ldon	12	30	− 2	7	11	20	22	9	38	9†	55	17	57	30	58	11	44	23†	24	27	9	19†	− 7	14
uit City	15	13	3	7	12	1	25	9	35	1	55	2†	62	2	58	2	48	26	28	27	10	20	1	15
ano ‡‡	11	13	0	7	9	20	23	9	37	15	55	16	56	30	58	6†	43	23†	25	27	7	20	− 2	14
odland	10	13	2	7	2	20	18	9	34	9†	53	17	47	30	52	5	38	27	22	27	5	20	−10	15
ollister	16	30	4	7	16	12	26	9	42	2†	54	17	60	19	60	14†	40	28	28	28†	12	20	0	15
ouston	14	31	0	7	10	21	23	9	35	9	56	17	56	30	60	13	42	26	26	27	7	20	− 2	15
onton	11	13	3	7	0	20	22	9	34	9†	54	17	45	30	53	5	36	27	24	27	9	20	−13	15
skonong	18	13	4	7	14	20	26	9	42	1	57	17	64	30	66	15	48	26†	29	27	12	20	− 2	15
banon	10	30	− 2	7	10	20	19	9	37	14	54	16	60	2†	58	4	40	26	23	27	8	20	− 5	14
ckwood	9	30	0	7	8	20	25	9	38	13	56	17	63	31	55	29	45	26	26	27	14	19	− 1	14
ountain Grove	14	30	− 5	7	14	2†	21	9	38	9†	55	16	61	18	59	4	40	26	25	27	8	20	− 2	15
ount Vernon‡‡	6	30	− 1	7	14	20	21	10	36	13†	55	29	62	5†	59	30	43	25†	27	27	12	20	− 2	14†
osho	0	30	0	7	15	12	20	9	35	14	52	28	61	19	54	29	40	26	25	27	12	20	4	15
lla	15	13	− 2	7	7	20	24	9	39	9	52	16†	57	30	60	29	45	26†	26	27	8	20	− 8	14
ringfield	13	30	− 2	7	17	20	25	9	40	13	57	16	64	21	60	28	47	23	28	27	13	19	− 2	14
Southwest Plain.																								
moret	10	12	− 3	7	12	20	25	9	38	14	56	28	59	2	55	29	43	26	25	27	11	19	− 4	14
pleton City	13	8†	.....	.....	10	20	25	9	35	13	58	17	55	1	51	28	44	28	27	27	11	18	.....	.....
inton	16	12	1	7	10	1†	28	8	37	9	57	3	58	2	58	15	42	26	27	27†	10	19	− 5	14
arrisonville	13	13	− 3	7†	12	20†	25	9†	40	14	59	18†	61	2†	58	29	45	24†	26	27.	10	19†	− 8	14
plin	15	30	0	7	19	20	25	9	43	8	.....	.....	.....	.....	.....	.....	51	3†	.....	....†	.....	.....	.....	.....
mar	12	30	0	7†	13	20	24	9	37	13	57	17	63	2	50	29	44	26	27	27	15	19†	2	14
monte	12	12	− 3	7	12	20	24	9	35	14	52	17	56	30	50	11	41	25†	22	27	8	18	−12	14†
rshall	10	12	− 4	7	8	20	23	9	37	12	52	17	57	30	53	28	45	23†	24	27	8	19	− 8	14†
arrensburg	12	12	− 3	7	13	20	24	9	40	13	55	17	59	1	56	29	45	26	26	27	8	19	− 7	14
arsaw	8	30	0	7	8	20	22	9	34	9	57	16	56	30	53	29	41	26	24	27	12	19†	− 9	15
Northwest Plateau.																								
alon	6	12	− 7	7	13	20	24	9	40	8†	52	17	58	18	55	11	45	26	24	27	5	19	−11	26
thany	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	17	58	2†	55	11	44	23†	19	27	2	19	−16	26
nception	3	12	−11	7	8	20	22	8	38	12	52	17	58	18	56	11†	47	25	26	27	2	19	−13	26
ant City	3	12	−10	7	10	1	22	9	35	9	52	17	57	2†	55	29	45	23	23	27	3	19	−12	26
nsas City	10	12	− 4	7	16	22	25	8	42	12	58	17	62	31	58	28	50	23	30	27	9	19	− 4	14
lder	6	12	− 8	7	8	20	25	9	42	12†	54	17	60	19	58	27†	46	23†	24	27	8	19	−10	14
xington	10	12	− 7	7	13	20	23	9	41	14	52	17	61	2†	52	11	44	23†	24	27	8	19	− 7	26
erty	10	12	− 5	7	8	20	23	9	39	13	53	17	59	2	55	11	45	23	24	27	7	19	− 7	16
ryville	3	12†	−11	7†	8	20†	21	8†	36	13	49	17	57	20	53	11	44	26†	22	27†	2	20	−10	14†
gon	6	12	− 8	7	6	20	22	8	36	13	53	17	60	18	57	27	40	23	23	27	5	19	−12	14
Joseph	8	12	− 7	7	10	20	24	8	40	14	55	17	60	20	58	28	47	23	25	27	7	19	− 8	14
rkio	.....	.....	.....	.....	.....	.....	.....	.....	36	13	53	17	56	20	52	11	45	26	21	27	4	19	−11	14†
nton	5	12	− 7	7	12	1	25	9	40	12	51	17	60	18†	55	11	46	23†	26	27	5	19	− 9	26

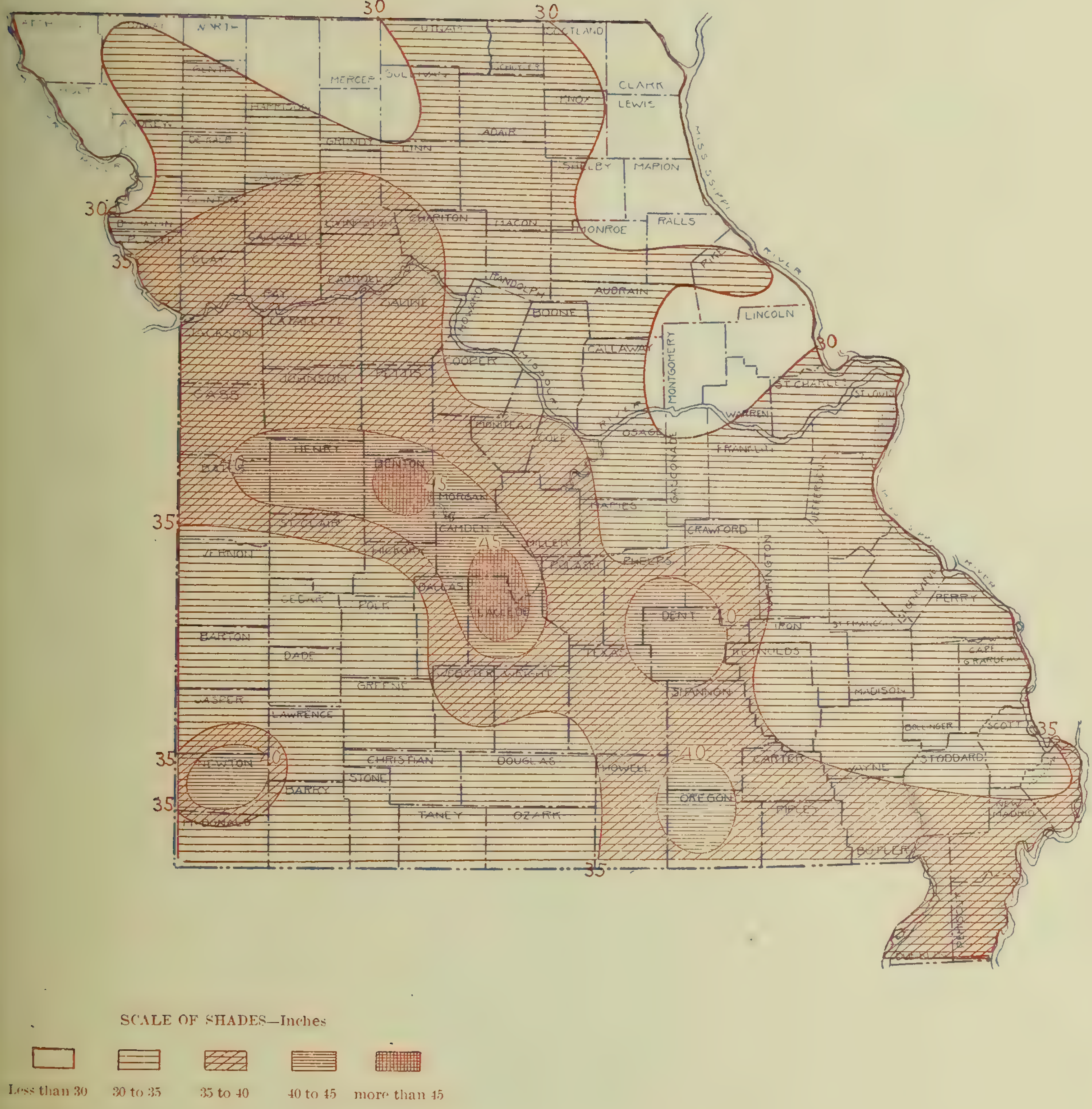
OBSERVATION STATIONS



COOPERATIVE OBSERVERS

Stations	Name	Stations	Name	Stations	Name
Amoret	Darby Fruit Farm.	Goodland	F. M. Adams.	Mountain Grove‖	Mo. Fruit Exp. Sta.
Appleton City	Mark Brown.	Gorin	J. W. Pulliam.	Mount Vernon	J. R. White & Son.
Arlington	G. V. Randolph.	Grant City	W. H. Campbell.	Neosho	W. O. Buck.
Avalon	F. G. Ashbaugh.	Hannibal***	U. S. Weather Bureau.	Nevada	C. Jewell.
Bagnell	Mrs. Nellie V. Houser	Harrisonville	A. J. Sharp.	New Madrid‖	Miss Josie Smith.
Belle	A. J. Wofford.	Hermann	C. T. Maushund.	Oakfield	E. E. Steines.
Bethany	M. H. Moulton.	Hollister	W. P. Chapmann	Oregon	Tom Curry.
Birchtree	V. H. Kirkendall.	Houston	R. F. Harmon.	Palmyra‖	W. B. Markell.
Bolivar	A. C. Fink.	Ironton‖	W. H. Delano.	Patton (near)	Ennis Ellis
Boonville	C. Randecker.	Jackson	L. M. Bean.	Poplar Bluff	M. S. Wiseheart.
Brunswick‖	Louis Benecke.	Jefferson City‖	Miss Emma Swift.	Rolla	Prof. Elmo G. Harris.
Cape Girardeau	D. L. Albert	Joplin	Joplin High School.	St. Catherine	L. D. Baker.
Cardwell	E. M. Perry.	Kansas City***	U. S. Weather Bureau.	St. Charles	L. C. Saeger.
Caruthersville	H. E. Averill.	Keytesville	J. T. Dewey, M. D.	St. Joseph***	U. S. Weather Bureau.
Cassville	Mrs. Zuma Bloomer.	Kidder	J. F. Sharp.	St. Louis (1)***	U. S. Weather Bureau.
Clinton	A. E. Derwent, M. D.	Koshkonong	R. M. Hitt.	St. Louis (2)	St. Louis University.
Columbia***	U. S. Weather Bureau.	Lamar	E. H. Adams.	Sikeston	H. B. Derr.
Crocker	Roy W. Reed.	Lamonte	J. Ed. Hall.	Springfield ***	U. S. Weather Bureau.
Conception	Fr. Adelhelm Hess.	Lebanon‖	O. L. Weissgerber.	Steffenville	Frank Hall.
Dean	H. E. Dean.	Lexington‖	J. W. Keithley.	Sublett	Lewis Spriggs
Doniphan	W. W. Martin.	Liberty	W. C. Wilmott.	Tarkio	John F. Frazier.
Duncan	C. A. Mingus.	Lockwood	C. S. Crow.	Trenton	W. H. Estes.
Eldon	Charles A. Kellogg	Louisiana	J. T. Farrell.	Unionville	Geo. W. Davis.
Fayette	Prof. T. B. Smith.	Macon	John A. Cook.	Warrenton‖	Prof. J. H. Frick.
Fruit City	R. C. Walton.	Marble Hill	Dr. A. F. Hendricks.	Warrensburg	Geo. H. Collins.
Fulton	Russell Johnson	Marshall	Prof. W. H. Black.	Warsaw	J. R. Smith, M. D.
Gano	A. C. Leach.	Maryville‖	J. R. Brink.	Wheatland	Mrs. S. A. Jackson.
Glasgow	J. J. Shaughnessy.	Mexico‖	J. F. Llewellyn.		

TOTAL PRECIPITATION FOR YEAR 1914.



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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

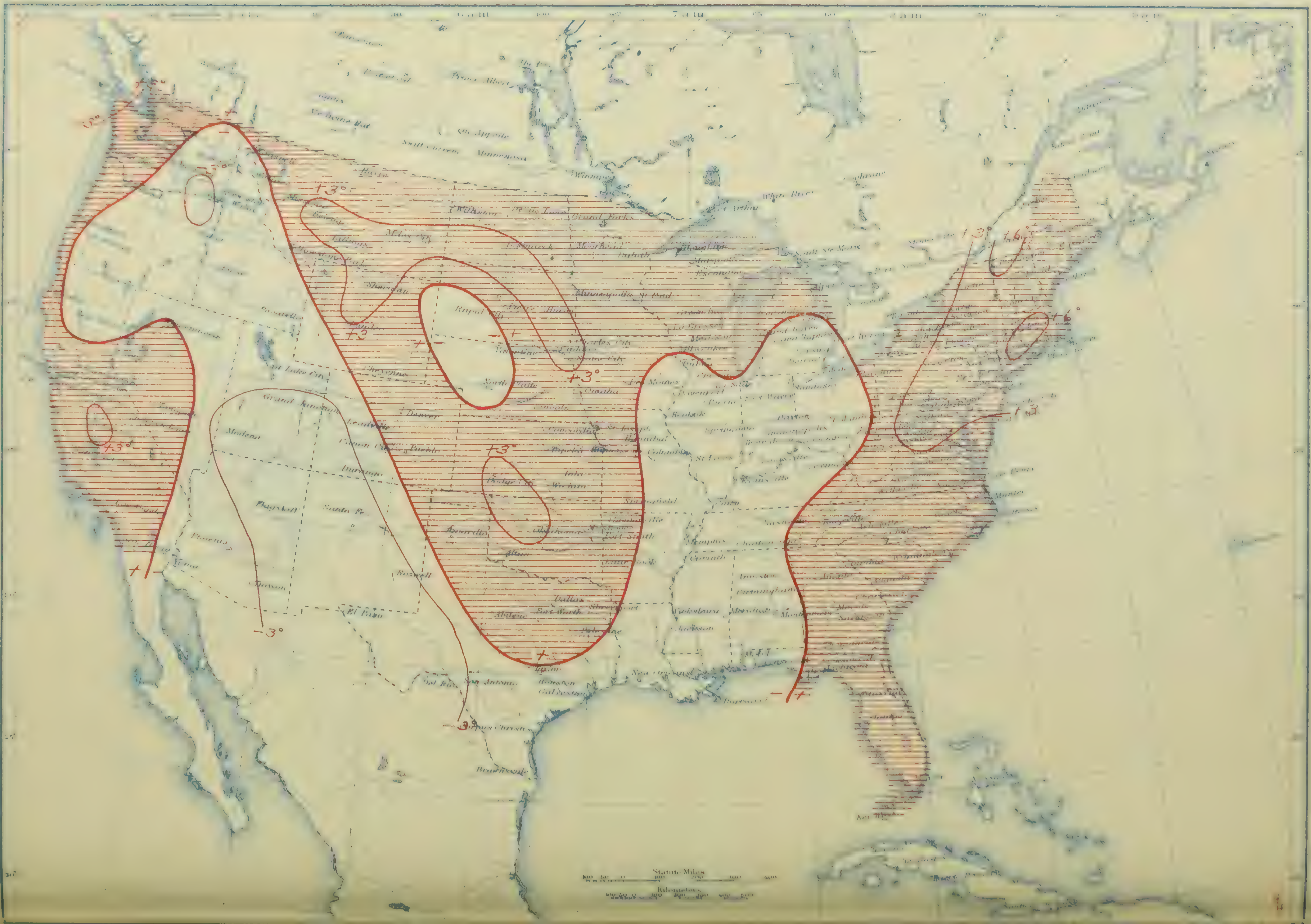
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JANUARY, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
FEBRUARY 20, 1915.

Departure of the Mean Temperature from the Normal, January, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

VOL. XIX. COLUMBIA, MO., JANUARY, 1915. No. 1

GENERAL SUMMARY.

The first half of the month was mild, but the latter half, save the last two days, was almost continuously cold, with zero temperatures on several days. Such outdoor work as is usual in a mid-winter month was carried on without much interference, and traffic was about normal, except a few trains were delayed several hours by a sleet and snow storm on the 22d, and again by rather severe weather on the 28th.

The ground was generally covered with an appreciable amount of snow during the coldest periods, which, while being favorable for wheat, was rather hard on range stock. The snow, however, melted rapidly during the last two days.

The month averaged colder than normal, the continuous temperature deficiency from about the 17th to the 28th being more than enough to overcome the accumulated excess of the first half of the month.

There were but two short periods of precipitation as a rule during the first two weeks, but the remainder of the month was quite wet, rain, sleet and snow being frequent, although at no time unusually heavy. There was an excess of moisture at all stations, except a few in the Ozark plateau and southeast lowlands, and along the Missouri River from Boonville to Hermann.

PRESSURE.

The mean sea-level atmospheric pressure for the State, 8 stations reporting was 30.07 inches, or .07 inch lower than normal. The pressure changes during the first half of the month were not unusual, but during the last two or three weeks they were marked, and stormy weather was prevalent.

TEMPERATURE.

The monthly mean for the State, as determined from the records of 71 stations, was 29.1°. The mean departure from the normal for 52 stations having 10 or more years' record was minus 2.2°. The highest local monthly mean was 37.2° at Caruthersville, and the lowest was 17.1° at Unionville. The highest temperature was 76° at Hollister on the 15th, and the lowest was 24° below zero at Louisiana. The eastern half of the State was somewhat colder than the western half. In the southeast lowlands, Ozark plateau, and northeast plain the temperature deficiency averaged 2°, 2.5° and 3.7°, respectively, while in the southwest plain and northwest plateau the average was 1.4° and 1.3°, respectively. The minimum temperature was 32° or lower on an averege of 26 days in the southeast lowlands, and 27 and 28 in the other divisions, and they were zero or lower on an average of 5 days, excluding the extreme southern counties where there were no zero temperatures.

HUMIDITY.

The mean relative humidity for the State was about 78 per cent, which is somewhat above the normal.

PRECIPITATION.

The average precipitation for the State, 79 stations reporting, was 2.92 inches. The departure from the normal for 65 stations having 10 or more years' record was plus 0.59 inch. The monthly averages and departures for the five divisions were as follows: northeast plain, 2.41 inches, excess 0.24 inch; southeast lowlands, 4.57 inches, excess 0.58 inch; Ozark plateau, 2.87 inches, excess 0.43 inch; southwest plain, 2.53 inches, excess 0.70 inch, and northwest plateau, 2.24 inches, excess 0.98 inch. The greatest local monthly precipitation was 5.81 inches at Caruthersville, and the least was 1.48 inches at Tarkio.

The snowfall of the month was below normal, averaging only 1.7 inches in the southeast lowlands to 7.9 and 9.4 inches in the northwest plateau and northeast plain, respectively. The greatest monthly amount was 16.4 inches at Hannibal, Marion County.

The average number of days with 0.01 inch or more precipitation was 8.

WIND.

The prevailing winds were from the northwest. Fresh to brisk winds prevailed on several dates, and strong to moderate gales on the 16th and 19th.

SUNSHINE AND CLOUDINESS.

The percentage of sunshine for the State was about 47, or about 10 per cent below the normal. The average number of clear days was 12, partly cloudy 5, and cloudy 14.

MISCELLANEOUS PHENOMENA.

Fogs—30th and 31st.
Halos, lunar—1st, 2d, 6th and 10th.
Halos, solar—18th, 20th and 27th.
Sleet—6th, 10th, 22d, 23d, 26th and 30th.
Thunderstorms—22d, 29th, 30th and 31st.

ERRATA FOR DECEMBER, 1914.

Bethany—The total snowfall should be 9.5 inches.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	30.06	82	......	144	47	6,305	8.5	36	sw	16
Hannibal	30.08	88	......	....	....	6,199	8.3	40	sw	16
Kansas City	30.05	78	73	159	52	9,019	12.1	49	nw	19
St. Joseph	30.06	85	77	142	47	6,685	9.0	38	w	16
St. Louis	30.08	82	72	121	40	10,046	13.3	45	sw	16
Springfield	30.05	87	76	151	49	8,358	11.2	38	nw	19
Cairo, Ill	30.09	78	71	....	....	6,928	9.3	30	se	16
Keokuk, Iowa	30.09	85	82	154	51	4,842	6.5	27	nw	6

COMPARATIVE DATA FOR JANUARY.

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	21.5	−8.7	74	−32	1.91	−0.08	......	6
1889	31.8	+1.6	69	− 2	2.36	+0.37	......	6
1890	33.8	+3.6	81	−19	4.25	+2.26	......	9
1891	34.1	+3.9	74	− 1	1.52	−0.47	......	6
1892	24.0	−6.2	67	−25	1.80	−0.19	......	4
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	3
1894	31.4	+1.2	77	−35	2.21	+0.22	2.96	5
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	5
1896	32.9	+2.7	71	− 9	1.17	−0.82	2.44	4
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	8
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	9
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	6
1900	34.5	+4.3	77	− 9	1.22	−0.77	2.30	4
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	4
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	5
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	6
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	8
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	8
1906	35.6	+5.4	76	− 8	3.64	+1.65	3.00	6
1907	34.3	+4.1	79	− 5	5.10	+3.11	4.42	12
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	5
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	7
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	5
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	5
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	4
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	8
1914	38.1	+6.9	78	1	1.42	−0.92	2.00	4
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	8

Climatological data for January, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip. of .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Booneville	Cooper	600	39	....	.....	....	....	....	....	....	1.52	−0.48	0.52	2.5	9	12	3	16	se	C. Randecker.
Brunswick	Chariton	652	36	21.4	−4.1	60	15	−19	29	48	2.69	+0.58	1.07	11.5	8	16	0	15	w	Louis Benecke.
Columbia	Boone	784	26	27.2	0.0	61	15	−13	28	36	2.10	−0.13	0.77	5.1	10	9	8	14	se	U. S. Weather Bureau.
Fayette	Howard	725	31	23.6	−4.3	60	15	−19	28	31	3.15	+1.12	1.15	7.7	10	16	3	12		Prof. T. B. Smith.
Fulton	Callaway	818	24	28.3	−2.8	60	16	−20	24	39	2.64	+0.65	0.68	6.5	10	12	0	19	w	L. A. Harley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	2.16	+0.47	0.84	3.0	8	5	11	15	se	J. W. Putnam.
Hannibal	Marion	534	23	24.8	−1.9	60	16	−16	24	37	2.58	+0.38	0.80	16.4	12	8	9	14	sw	U. S. Weather Bureau.
Hermann	Gasconade	483	42	....	.....	....	....	....	....	....	1.99	−0.26	0.62	8.0	12	6	6	19	e	C. T. [illegible]
Jefferson City	Cole	628	30	30.0	−0.1	65	15	−9	28	41	2.16	−0.12	0.70	7.0	10	15	1	15	w	Miss [illegible] Swift.
Keytesville	Chariton	...	3	....	.....	....	....	....	....	....	1.89		0.70	8.5	6	....				J. T. Dewey, M. D.
Louisiana	Pike	500	38	21.4	−3.3	58	16	−24	24	36	2.45	−0.39	0.90	15.2	11	11	4	16	nw	J. T. [illegible]
Macon	Macon	881	18	23.2	9.8	57	15	−18	28†	43	2.22	+0.78	0.82	7.6	7	11	5	15	sw	John A. Cook.
Mexico	Audrain	797	38	24.6	−1.4	59	15†	−16	28†	46	2.30	+0.19	0.60	9.8	11	10	1	20	s	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	29.1	−3.1	60	16	−11	28	29	2.53	+0.14	1.10	10.0	9	7	9	15	nw	F. J. [illegible]
Palmyra	Marion	652	4	22.4	.....	59	16	−18	24†	41	3.10	......	0.80	10.3	9	6	6	19	se	W. B. Markell.
St. Catharine	Linn	914	3	24.1	.....	57	15	−20	28	31	1.98	....	0.83	5.2	10	10	11	10	nw	L. D. Baker.
St. Charles	St. Charles	614	38	28.4	−2.8	60	16	−12	28	30	2.18	+0.15	0.92	9.2	9	9	5	17	nw	L. C. Sauter.
St. Louis(1)	St. Louis City	717	45	29.6	−1.4	59	16	−4	28	27	2.83	+0.56	1.22	11.6	12	9	7	15	s	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	28.4	.....	58	16	−5	28	28	3.43	......	1.08	15.4	10	11	2	18	se	St. Louis University.
Steffenville	Lewis	576	23	24.6	−4.1	57	15†	−21	28	36	2.51	−0.22	0.75	13.5	7	14	8	9	w	Frank Hall.
Unionville	Putnam	1,072	23	17.1	−6.2	40	16	−23	28	48	2.65	+0.59	0.60	15.0	8	15	4	12	s	Geo. W. Davis.
Vandalia	Audrain	796	5	26.0	.....	57	16	−13	28	38	2.19	......	0.80	8.5	6	19	0	12	nw	C. B. Ellis.
Warrenton	Warren	865	25	25.8	−3.6	59	16	−12	29	44	1.96	−0.65	0.62	8.5	9	6	7	18	s	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	3.70	−0.34	2.20	1.0	6	15	0	16	s	D. L. Albert.
Cardwell	Dunklin	...	5	36.4	.....	64	15	14	24	36	4.76	......	1.95	0.5	7	14	6	11	se	J. M. Perry.
Caruthersville	Pemiscott	...	25	37.2	2.1	61	14	14	24	30	5.81	+1.83	3.10	2.0	8	12	2	17	n	H. L. Averill.
Doniphan	Ripley	440	11	33.6	−3.9	60	16	10	24†	34	3.98	+0.01	2.08	0.5	7	9	8	14	nw	W. W. Martin.
Jackson	Cape Girardeau	458	25	33.8	−0.5	58	15	6	28	29	5.23	+1.60	1.83	0.5	7	4	11	16	n	L. M. Bean.
Marble Hill	Bollinger	420	24	33.1	−1.3	60	16	6	28	30	4.10	+0.86	1.80	0.0	5	12	11	8	n	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	4.82	−0.42	2.10	1.0	12	9	1	21	s	Miss Josie Smith.
Patton (near)‡‡	Bollinger	......	1	....	.....	....	....	....	....	....	4.38	.....	1.60	0.0	5	10	0	21	s	Christian Seabaugh.
Poplar Bluff	Butler	333	12	34.1	3.3	62	13†	11	23†	34	4.48	+0.92	2.52	6.0	6	12	0	19	....	M. S. Wiseheart.
Sikeston	Scott	328	15	35.4	−2.0	59	7	10	19	29	4.17	−0.30	1.55	2.5	8	9	10	12	n	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	43	34.1	−0.7	57	15	10	24	24	1.85	−1.03	2.04	4.5	9	6	11	14	nw	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.78	−0.24	0.85	8.5	9	12	1	18	n	G. V. Randolph.
Belle	Maries	1,000	21	31.7[d]	0.7	61	....	−12	28	36	3.38	+1.15	1.60	3.8	4	4	11	16	w	A. J. Wofford.
Birchtree	Shannon	1,260	22	32.6	−2.1	63	16	5	23†	30	4.27	+1.55	1.35	0.0	5	14	6	11	......	V. H. Kendall.
Bolivar	Polk	1,020	28	32.3	−2.5	62	15	0	28	30	2.00	0.00	0.58	3.0	7	17	3	11	nw	A. C. Fink.
Cassville	Barry	1,500	5	27.2	.....	66	15	5	24†	44	4.04	......	0.92	1.5	6	14	3	14	nw	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	30.1	.....	60	16	−4	28	35	.....	......	....	5.1	....	14	13	4	n	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	30.4[n]	−6.9	66	14	4	23†	....	2.35	+0.50	0.87	0.5	....	8[n]	0[n]	9[n]	......	H. E. Dean.
Duncan	Webster	...	3	30.0	.....	59	13	2	23†	29	3.08	......	1.02	5.6	11	17	0	14	s	C. A. Mingus.
Eldon	Miller	934	15	28.8	.....	61	15	−10	28	34	2.02	−0.06	0.60	6.1	8	8	14	9	nw	Charles A. Kellogg.
Fruit City	Reynolds	1,150	3	33.0	.....	61	16	11	25	27	4.34	......	1.53	2.0	8	15	8	8	w	R. C. Walton.
Gano‡‡	Dent	...	12	30.5	−3.8	63	16	−3	28	30	3.39	+0.47	1.61	4.9	10	11	3	17	w	A. C. Leach.
Goodland	Iron	1,000	11	29.7	−4.3	63	16	−1	21†	37	3.23	+0.21	2.29	0.0	4	12	6	13	n	F. M. Adams.
Hollister	Taney	1,000	7	35.8	.....	76	15	6	23	44	1.75	......	0.50	0.5	6	16	0	15	sw	W. P. Chapman.
Houston	Texas	1,280	23	32.4	−1.6	61	16	3	28	29	2.49	+0.31	1.11	1.2	9	14	2	15	s	R. F. Harmon.
Ironton	Iron	925	38	31.0	−1.3	61	16	2	28	36	4.54	+1.53	2.17	2.8	9	11	6	14	n	W. H. Delano.
Koshkonong	Oregon	911	15	34.8	−2.4	63	16	8	28	29	3.71	+0.51	1.60	0.2	8	12	4	15	nw	R. M. Hitt.
Lebanon	Laclede	1,105	27	32.6	−1.0	64	14	4	22	34	2.73	+0.24	0.60	0.0	8	9	9	13	......	O. L. Weissgerber.
Lockwood	Dade	1,088	21	32.4	.....	66	15	2	28	28	2.33	+0.89	0.59	T.	6	13	2	16	nw	C. S. Crow.
Mountain Grove	Wright	1,490	17	31.0	−3.2	62	15	4	23†	30	2.46	−0.08	0.82	1.0	6	14	5	12	nw	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	29.0[k]	−6.0	....	....	5	23	....	3.08	+0.88	1.15	T.	....	7[k]	4[k]	9[k]	se	J. R. White & Son.
Neosho	Newton	1,083	33	35.0	−0.1	66	15	6	23	36	1.75	−0.61	0.50	T.	7	15	5	11	sw	W. O. Buck.
Rolla	Phelps	1,139	34	29.4	−2.3	61	16	−4	28	33	2.50	+0.19	0.86	5.0	8	12	11	8	s	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	32.2	+0.9	60	15	3	23	36	2.35	−0.31	0.92	2.8	10	15	2	14	se	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	.. .	....	....	2.42	+0.55	1.20	6.1	7	14	4	13	s	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	7	30.2	.....	66	15	−13	28	39	2.66	......	0.80	5.0	8	16	3	12	sw	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	Mark Brown.
Clinton	Henry	800	29	29.2	.....	62	15	−10	28	42	2.95	+0.91	1.00	5.0	5	13	4	14	se	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	26.1	−1.2	53	14†	−13	28	46	2.12	+0.57	0.82	5.0	7	11	2	18	sw	A. J. Sharp.
Joplin	Jasper	975	38	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	Joplin High School.
Lamar	Barton	964	35	32.0	−0.7	66	15	1	28	38	1.90	+0.20	0.58	T.	6	12	4	15	se	E. H. Adams.
Lamonte	Pettis	863	27	27.8	.....	63	15	−23	28	41	2.55	+0.75	0.90	9.5	8	14	5	12	sw	J. Ed. Hall.
Marshall	Saline	779	25	26.4	−1.8	62	15	−16	28	30	1.96	+0.15	0.60	5.8	11	13	6	12	se	Prof. W. H. Black.
Nevada	Vernon	860	22	31.0	.....	61	15	−6	28	31	2.96	+1.38	1.40	3.0	7	9	13	9	nw	C. Jewell.
Warrensburg	Johnson	883	37	29.0	+0.3	63	15	−14	28	33	2.67	+0.88	1.35	10.5	10	15	5	11	se	Geo. H. Collins.
Warsaw	Benton	883	11	30.1	−3.5	67	15	−14	28	41	3.04	+0.78	0.80	8.0	10	15	4	12	nw	J. R. Smith, M. D.
Northwest Plateau.																				
Avalon	Livingston	......	30	25.6	2.4	60	15	−18	28	29	3.16	+1.34	1.25	7.0	9	18	3	10	nw	F. G. Ashbaugh.
Bethany	Harrison	881	26	23.4	1.3	58	15	−23	28	33	2.60	+0.52	0.43	7.0	7	14	4	13	nw	M. H. Moulton.
Conception	Nodaway	982	31	22.6	−2.4	54	15	−20	28	31	1.79	+0.77	0.40	4.5	8	9	11	10	sw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	22.6	−2.2	54	15	−19	28	32	2.03	+1.07	0.47	7.0	7	12	7	12	s	W. H. Campbell.
Kansas City	Jackson	963	27	28.6	+2.2	62	15	−10	28	31	2.53	+1.40	0.75	5.5	11	11	8	12	nw	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	25.8	−0.4	60	15	−15	28	28	2.22	+0.87	0.52	10.0	9	11	9	11	nw	J. F. Sharp.
Lexington	Lafayette	813	31	27.0	−0.5	61	15	−14	28	30	2.58	+1.01	0.80	6.8	9	17	0	14	s	J. W. Keithley.
Liberty	Clay	864	27	27.3	1.4	63	15	−13	28	40	2.18	+0.77	0.71	3.0	5	14	5	12	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	20.8	2.0	53	15	−18	28†	42	2.82	+1.64	0.80	16.0	8	16	2	13	nw	J. R. Brink.
Oregon	Holt	1,113	60	26.0	+2.4	55	15	−16	28	33	1.70	+0.16	0.74	13.6	6	14	6	11	nw	Tom Curry.
St. Joseph	Buchanan	967	11	25.6	.....	58	15	−12	28	29	2.07	+1.00	0.72	7.2	10	10	10	11	nw	U. S. Weather Bureau.
Tarkio	Atchison	......	1	22.8	.....	51	15	−22	28	33	1.48	......	0.46	10.5	6	17	3	11	nw	John F. Frazier.
Trenton	Grundy	812	21	26.0	1.1	51	15	−16	28	26	2.59	+1.19	0.63	5.0	11	14	3	14	w	W. H. Estes.
State means and extremes			...	29.1	−2.2	76	15	−24	21	48	2.92	+0.59	3.10	5.4	8	12	5	14	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used to determine the section or division means.

Reference letters (a, b, c), appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. **Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for January, 1915.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
ville	Missouri						.20	.10				.07					.30				.06		.16	.03	T.				T.		.08	.52	1.52
swick	Grand						.10					.12					1.07				.07		.39	.05					.10			.79	2.69
umbia***	Missouri	T.				.11	.28				.03						.30	T.		.06	T.	.18	.23					.01		T.	.77	.13	2.10
ette	do		.01			T.	1.15				.10						.44			.05		.20	.40					.10			.47	.23	3.15
on	do						.48				.08	.15					.32			.02			.50						.10	.05	.68	.26	2.64
n	Mississippi						.22				.24						.84			.10		.04	.06								.29	.37	2.16
nibal***	do	.02				.08	.41				.15	T.					.24			.06	T.	.31	.49					.04		.01	.38	.36	2.58
atan	Missouri		.01				.16	.15				.15					.12	.18			.06		.26	.04					.02		.22	.62	1.99
son City	do						.20	.10				.20					.30				.10		.20	.05					.01		.30	.70	2.16
esville	Chariton						.08										.45			.08			.70					.08				.50	1.89
siana	Mississippi					.10	.58					.28					.28			.10	.04	.02	.90					.02	T.	.03	.10	.10	2.15
on	Chariton		T.				.11					.17					.68				.06		.33	.05						T.		.82	2.22
ger	Mississippi	T.					.19	.34				.10					.28	.03		T.	.06	T.	.60	.07					.06		.07	.50	2.30
eld	Meramec	T.					.27				T.	.04					.17			.09	T.	T.	.51					.05		.03	1.16	.27	2.53
wm	Mississippi						.49	.19				.25					.24				.08		.80	.15						T.	.60	.30	3.10
Catherine	Grand	T.				T.	.12				.16	.01					.83			.04		.02	.15			T		.01	T.		.25	.39	1.98
arles	Missouri	T.					.30				T.	.11					.11			.10	T.		.92					T.	.02	.20	.47	.25	2.48
uis (1)***	Mississippi	T.		T.			.24				.10	.05					.15			.04	.01	.20	.47					.01		.30	1.09	.17	2.83
ouis (2)	do	.01					.26				.22	T.					.20			.07	T.	T.	1.08					T.	.08	.21	1.08	.22	3.43
erville	do	T.					.40					T.					.50			.14	T.	.05	.40								.75	.30	2.54
nville	Grand						.25					.25					.30	.45			.10	T	.60	.25					T.	T.	T.	.45	2.65
dalia	Mississippi						.35				.19						.30			.05	T.		.80					T.		.50		T.	2.19
renton	do		T.				.17	.15									.17	.05			.11		.37	.04					T.		.28	.62	1.96
theast Lowlands.																																	
well	Mississippi						.41				T.						.80		.12	.12		T.	.71								.65	1.95	4.76
ersville	do					T.	.55					.18			.05		.32		.15	T.		T.	.75			T.					.71	3.10	5.81
plan	Black					T.	.10				.02						.42		T.	.05		T.	.36						T.	T.	.95	2.08	3.98
son	Mississippi						.37				.05						.40			.40		.68									1.50	1.83	5.23
ble Hill	do						.20										.30						.70								1.10	1.80	4.10
Madrid	do						.17	.55				.20	.01			.16		.32		.15	.01		.10	.95							.10	2.10	4.82
n (near)	do									.23							.20						.90								1.60	1.45	4.38
ar Bluff	Black					.59					.10					.31						.26								2.52	.70		4.48
ston	Mississippi						.43					.25			.04				.16		.10		.67								.97	1.55	4.17
o, Ill.***	do					T.	.77					.07	T		T		.25		.35	.05	T.	.03	.62		T.				T.	T.	1.32	1.39	4.85
rk Plateau																																	
ngton	Gasconade						.06	.05				.22					.30	.06			.10		.08	T.							.06	.85	1.78
	Meramec										T.						1.60				.08			.30								1.40	3.38
ttree	Black											.18					.53						.88								1.35	1.33	4.27
ar	Osage					.14					.55						.23			.10			.10								.58	.30	2.00
ville	White										.92						.58		T.				.75					.72			.25	.82	4.04
ker	Gasconade																																
	Neosho										.65							.10									.05			.25	.43	.87	2.35
an	Osage					T.	.07				.25	.05					.50	.01		.05			.75						.01	.05	1.02	.32	3.08
n	do					T.	.15				.16	T.	T.				.38			.02			.39					.02		T.	.60	.30	2.02
t City	Black						.21					.12					.40			.15	.05		.68								1.53	1.20	4.34
	Meramec						.09				.15	.14					.27			.18	.04		.55						.04	T.	1.61	.32	3.39
nand	Black						.20										.29														2.29	.45	3.23
ter	White											.20					.30							.30				.05			.40	.50	1.75
ston	Gasconade						T				.02	.15					.25			.05	T.	T.	.30		T.				.02	.02	1.11	.57	2.49
an	Mississippi						.05	T.				.05					T.	.60			.20	T.	.60	.30		T.			.02		.55	2.17	4.54
konong	Black						.07				.20						.48			.02			.26						T.	.06	1.02	1.60	3.71
on	Osage						.12					.45					.52				.03	.50	.01								.50	.60	2.73
wood	do						.10		.20	.50							.59			T.									T.		.56	.38	2.33
tain Grove	White						T.					.14					.53				T.		.39	.18							.82	.40	2.46
t Vernon	Neosho						.13				**						1.00			T.			T	T.	.15						1.15	.65	3.08
o	do					T.	.02				.37	.03					.50		T.				.14					T.		T.	.39	.30	1.75
	Meramec						.12	T.				.40					.06				.20		.45						.02		.39	.86	2.50
gfield**	White					T.	.09				.26	T.					.36	.01	T.	.03		T.	.25					.03		.09	.63	.60	2.35
atland	Osage						.02				.05									.05			.50					.02		1.20		.58	2.42
hwest Plain.																																	
et	Osage		T.			.02	.06				.45						.80						.25				T.			.18	.45	.45	2.66
ton City	do																																
an	do						.35										1.00						.50								1.00	.10	2.95
sonville	do						.20					.13					.82			T.	T.		.24						.06		.15	.52	2.12
n	Neosho																																
ar	do						T.	.04			.41	T.					.56			T.	T.		.17	T.					T.	T.	.58	.14	1.90
ate	Missouri					T.	.20				.15						.90			.15				.55				.05		T.	.40	.15	2.55
all	do					.60	.01	.11			.05						.21			.10	T.	.08	.30					.10			.20	.20	1.96
la	Osage				T.	T.	.27				.41						1.40		.05				.25							.40		.18	2.96
ensburg	Missouri					T.	.07				.16						1.35			.21	.02	.03	.71					.02		.02	.08		2.67
saw	Osage					T.	.15				.20						.42	T.		.15	.06		.38					.06		.17	.80	.65	3.04
thwest Plateau.																																	
n	Grand					.08	.15				.13					.85						.20	.40					.10			.50	.75	3.16
any	do					.22	.27				T.						.43			T.	T.	.35	.35					T.			.28	.10	2.00
ption	Missouri					.19	.18				.20						.40		T.	T.		.40						.05	T.	T.	.21	.16	1.79
City	Grand					.35	.26				T.						.47		T.			.40	.30				T.	T.			.20	.05	2.03
sas City***	Missouri					.28	.04				.15						.56		T.	.09		.20	.16			T.		.05		.01	.24	.75	2.53
r	Grand						.52					.11				.45				.05		.20	T.			.30			.04	.20	.35		2.22
gton	Missouri						.13					.18					.80				.07		.38	.09					.10		.20	.63	2.58
ty	do					T.	.50				.15						.71			T.	T.	.36										.46	2.18
ille	do						.33					.15					.42	.52			.10		.80						.30			.20	2.82
n	do						.15				.21						.74			T.		.34						.11			.15	T.	1.70
seph***	Missouri					.31	.08				.07						.45		T.	.05	T.	.25	.12			T.		.08	T.	T.	.27	.39	2.07
	do					.03					.34						.46			T.		.20						.05			T.	.40	1.48
ton	Grand	T.		T.		.43					.12						.63		T.	.07		.29	.06			.03		.04		.09	.24	.59	2.59

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 period, midnight to midnight.

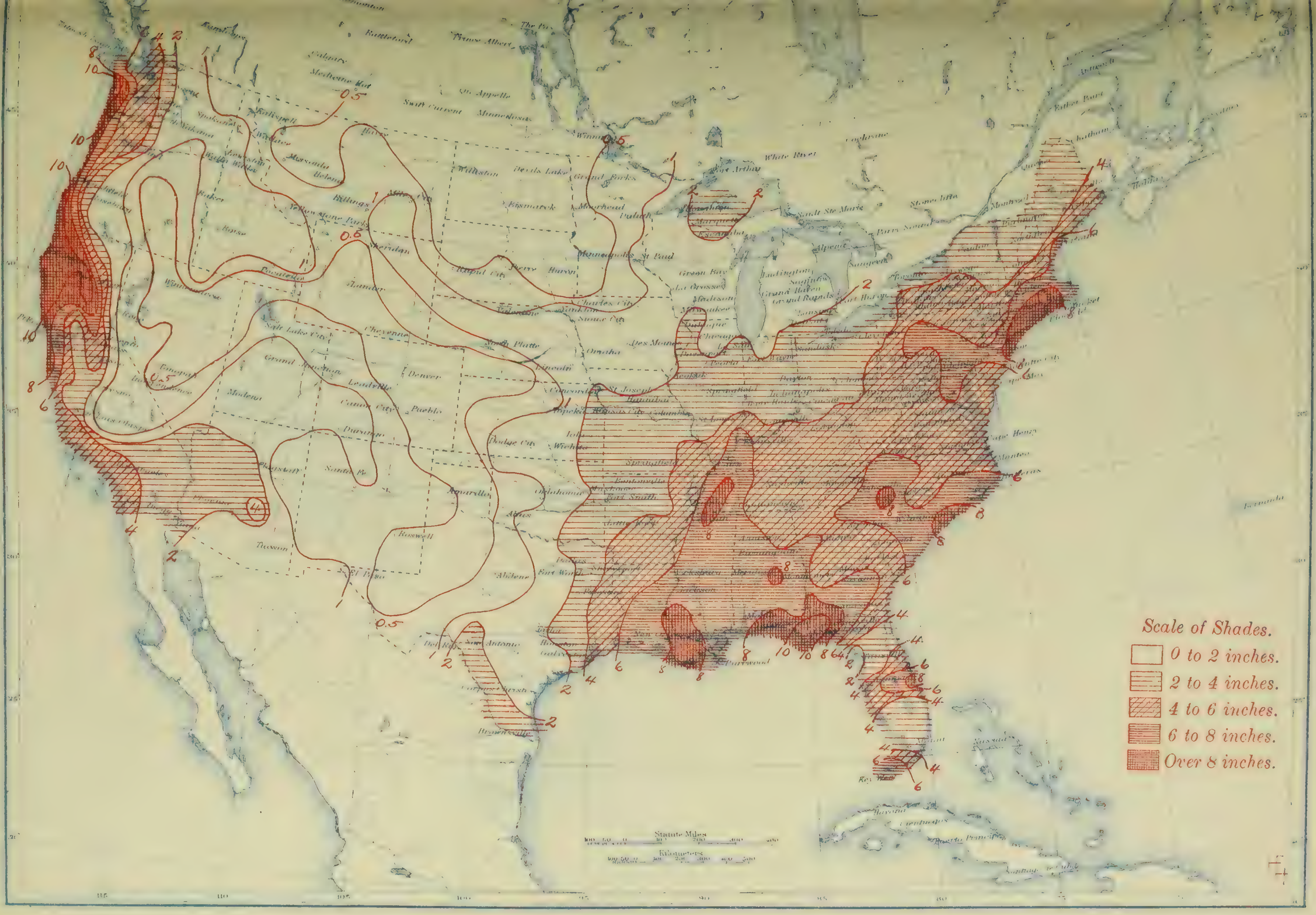
Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for January, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	42	32	30	39	43	35	43	34	50	36	41	40	50	55	60	49	31	36	34	29	19	13	13	16	21	33	20	15	25	41	43
	Minimum	20	14	15	11	15	33	25	22	21	22	31	20	21	27	30	38	21	16	16	15	9	10	−12	−12	−3	−3	11	18	19	11	28
Columbia	Maximum	41	33	38	41	47	42	43	30	49	40	40	41	52	54	61	58	28	31	34	25	20	19	14	16	26	31	26	15	26	42	51
	Minimum	30	18	21	18	35	31	28	22	23	31	27	21	33	29	58	22	22	17	21	13	9	0	−8	6	2	11	0	−15	7	20	[illegible]
Fayette	Maximum	39	30	33	39	42	39	41	29	47	35	37	36	48	51	60	54	28	33	32	25	16	14	10	13	21	27	21	8	23	28	[illegible]
	Minimum	22	13	18	13	32	30	25	26	20	32	24	18	33	30	32	20	18	14	18	10	6	−6	−13	−13	−1	5	−8	−15	−1	22	[illegible]
Hannibal	Maximum	41	27	37	35	45	41	42	29	46	40	34	38	49	50	57	60	28	29	33	24	18	17	11	11	22	33	18	[illegible]	22	[illegible]	[illegible]
	Minimum	23	11	21	19	26	30	25	20	18	31	29	26	35	30	32	23	23	19	18	15	8	0	−10	−16	2	6	−5	15	2	21	[illegible]
Jefferson City §§	Maximum	47	48	38	48	57	50	50	33	52	45	34	49	55	54	65	64	36	36	37	32	30	36	19	19	35	42	30	2	37	[illegible]	[illegible]
	Minimum	22	20	21	20	20	35	26	22	20	22	22	24	28	30	32	41	22	18	20	16	10	16	6	6	3	9	13	9	−7	17	[illegible]
Macon	Maximum	40	32	32	39	42	38	40	30	49	36	38	38	47	52	57	55	29	34	34	25	18	15	11	17	24	34	10	11	25	[illegible]	[illegible]
	Minimum	17	10	10	14	15	32	25	20	18	21	30	17	17	30	35	34	20	15	15	13	4	7	12	−11	3	5	8	−18	−18	7	[illegible]
Mexico §§	Maximum	42	32	37	39	40	46	41	30	49	43	35	40	51	51	59	59	30	31	31	28	19	17	15	16	27	34	9	12	30	46	[illegible]
	Minimum	11	16	16	21	21	32	27	21	17	19	33	25	24	29	30	35	23	17	17	14	4	5	9	12	8	3	9	−16	−16	7	[illegible]
Oakfield	Maximum	41	37	50	35	43	44	45	38	50	40	36	42	53	54	57	60	42	29	32	31	25	24	19	18	33	38	28	18	25	40	[illegible]
	Minimum	28	20	26	24	24	32	27	21	22	33	30	26	29	32	36	40	23	20	24	15	7	12	−4	−2	9	10	10	−11	5	[illegible]	[illegible]
St. Catharine	Maximum	41	34	30	36	41	41	38	33	45	39	38	36	45	51	57	52	29	35	33	28	18	15	10	16	22	32	26	8	23	[illegible]	[illegible]
	Minimum	17	6	18	12	31	30	23	21	18	32	28	17	31	26	33	26	18	16	24	12	4	6	−13	−15	0	6	2	−20	4	26	[illegible]
St. Louis (1)	Maximum	42	33	47	32	42	47	44	37	47	41	38	39	50	53	54	59	33	32	34	29	27	26	18	15	30	34	27	14	25	35	[illegible]
	Minimum	28	22	26	27	27	35	30	25	27	35	30	28	30	38	37	32	25	23	27	19	14	9	1	3	13	15	5	−4	9	24	[illegible]
Unionville §§	Maximum	32	20	18	36	37	35	30	22	34	30	36	35	34	35	39	40	26	25	22	14	8	4	−5	10	12	26	3	12	26	34	[illegible]
	Minimum	14	4	0	10	15	33	20	17	12	18	20	15	20	22	23	33	11	12	14	8	1	3	−11	−12	0	5	3	−23	22	12	[illegible]
Warrenton §§	Maximum	41	33	43	39	44	42	42	29	47	45	39	40	50	51	56	59	30	28	32	25	23	[illegible]	15	16	29	35	18	16	22	42	[illegible]
	Minimum	17	17	17	23	24	28	23	20	17	22	25	26	24	32	33	36	22	20	19	15	5	5	8	−5	−2	6	8	−11	−12	10	[illegible]
Southeast Lowlands.																																
Cardwell	Maximum	....	...	....	45	54	55	60	50	55	45	...	46	53	60	64	60	55	37	40	38	34	50	35	24	37	35	38	34	40	47	[illegible]
	Minimum	25	26	27	25	24	38	28	28	25	28	....	29	25	40	28	50	28	27	15	26	24	29	15	14	15	19	26	16	17	35	[illegible]
Caruthersville	Maximum	55	49	47	45	48	53	49	47	56	47	47	48	56	61	60	57	54	39	39	38	35	50	37	24	38	39	38	36	39	47	[illegible]
	Minimum	25	28	32	27	25	42	32	29	28	32	38	31	32	40	33	49	30	26	15	26	23	36	18	14	15	22	26	18	20	27	[illegible]
Doniphan	Maximum	52	45	50	45	48	51	46	47	51	47	41	44	52	58	59	60	57	35	36	35	30	38	27	23	37	31	30	28	35	44	[illegible]
	Minimum	18	20	29	20	22	36	25	23	24	26	34	27	22	39	25	51	26	26	18	23	20	26	11	10	14	18	12	10	14	32	42
Jackson	Maximum	45	44	45	42	42	48	49	45	55	50	45	43	49	56	58	55	53	50	40	36	30	39	30	20	33	38	40	35	34	46	54
	Minimum	24	25	25	27	26	37	29	27	26	32	31	29	27	34	30	30	27	26	22	22	18	24	10	9	15	16	18	6	8	30	[illegible]
Marble Hill	Maximum	50	45	50	45	42	48	48	45	55	46	43	44	51	59	59	60	55	32	35	34	31	38	30	19	39	38	40	28	35	40	[illegible]
	Minimum	20	20	25	22	25	39	28	22	30	23	34	25	22	35	25	48	24	25	18	20	15	26	9	8	11	14	15	6	10	32	[illegible]
Ozark Plateau																																
Birchtree	Maximum	51	28	54	48	47	46	47	50	52	43	42	43	52	58	58	63	43	33	33	33	28	35	25	18	39	36	34	31	34	44	[illegible]
	Minimum	21	27	29	20	23	33	23	25	26	32	30	24	25	35	36	43	21	22	17	18	15	25	5	7	10	18	22	5	14	[illegible]	41
Cassville	Maximum	53	50	55	59	51	54	49	54	54	38	49	56	57	51	66	63	31	38	40	34	32	34	23	25	40	35	38	33	35	52	57
	Minimum	25	27	29	19	32	25	18	23	20	27	15	16	30	24	22	27	18	20	23	19	22	13	6	5	8	19	20	5	14	31	40
Duncan	Maximum	40	40	45	46	44	45	37	40	50	43	36	34	59	48	53	53	36	29	31	31	26	25	20	19	26	32	31	25	31	43	[illegible]
	Minimum	23	20	32	25	30	30	24	26	25	32	30	18	30	28	29	25	20	19	22	16	15	12	2	6	11	25	20	2	13	31	42
Eldon	Maximum	43	41	45	48	50	45	44	36	51	40	38	41	53	55	61	58	29	34	34	29	23	23	18	21	34	34	30	23	33	43	55
	Minimum	28	19	23	19	32	30	23	21	21	31	30	19	33	30	30	24	20	16	25	14	9	4	−8	−3	4	11	3	−10	8	29	[illegible]
Fruit City	Maximum	37	46	54	45	44	44	46	45	52	44	37	45	50	56	58	61	41	31	32	31	27	34	21	18	35	38	35	31	[illegible]	39	51
	Minimum	23	28	27	22	23	32	28	28	30	34	31	26	30	35	34	41	24	24	22	22	15	20	14	12	11	20	30	20	15	30	[illegible]
Gano	Maximum	44	44	52	48	44	44	43	44	50	43	36	42	51	52	58	63	37	28	31	28	25	29	17	16	32	36	30	26	32	41	57
	Minimum	26	22	31	18	28	32	25	24	27	32	30	24	31	32	35	37	21	19	20	15	7	14	−1	−2	7	15	15	−3	17	30	[illegible]
Hollister	Maximum	46	48	58	54	58	44	50	52	56	40	38	46	60	58	76	60	34	38	40	36	32	34	34	22	40	36	34	34	34	54	56
	Minimum	20	16	34	20	34	36	20	26	20	34	36	24	20	34	32	56	26	28	26	20	24	30	6	12	10	26	28	10	24	26	52
Ironton §§	Maximum	49	45	54	41	45	48	46	45	52	40	36	44	53	55	58	61	31	30	33	29	32	33	19	17	34	39	36	28	35	42	[illegible]
	Minimum	24	24	25	18	24	36	23	22	20	23	34	25	22	31	22	46	23	23	16	18	8	25	3	4	9	10	13	2	14	31	[illegible]
Lebanon	Maximum	48	50	52	56	51	43	45	51	53	38	45	46	55	64	60	60	34	36	29	32	24	26	25	22	40	37	30	46	37	49	42
	Minimum	28	30	27	24	27	39	27	27	28	35	36	22	26	30	34	43	22	18	26	15	17	4	8	10	10	11	11	10	11	19	[illegible]
Mountain Grove	Maximum	50	48	51	49	48	47	45	47	49	37	34	42	47	58	62	58	28	32	34	29	32	31	24	18	34	34	33	32	35	48	[illegible]
	Minimum	21	27	31	21	26	35	23	26	27	33	32	21	21	31	32	34	21	20	22	17	11	17	4	5	8	14	20	4	7	18	[illegible]
Neosho	Maximum	50	53	52	58	55	54	48	51	53	49	41	53	57	59	66	61	31	35	40	38	35	35	22	28	39	36	35	34	40	56	[illegible]
	Minimum	28	20	33	22	41	34	21	25	20	31	32	20	37	25	30	28	19	19	24	31	25	14	6	11	16	22	21	8	21	34	44
Rolla	Maximum	42	42	49	47	45	43	43	43	51	38	35	45	52	55	58	61	29	30	32	27	26	22	20	18	35	24	30	28	35	47	53
	Minimum	21	21	21	20	20	33	26	35	25	30	31	25	24	32	35	40	22	20	20	15	5	6	−2	−3	2	9	15	−4	4	23	34
Springfield	Maximum	44	45	48	51	50	45	43	46	49	40	37	43	53	53	60	56	26	33	34	27	29	31	18	20	24	32	34	29	34	48	53
	Minimum	32	27	27	25	36	30	26	32	33	32	30	25	35	33	41	20	18	19	25	17	20	5	3	10	16	25	5	5	23	32	40
Southwest Plain																																
Amoret	Maximum	45	44	39	55	54	53	50	43	51	41	45	49	56	57	66	59	31	34	39	36	26	24	18	24	34	35	34	26	33	45	50
	Minimum	30	20	31	21	37	31	22	22	19	33	30	22	34	28	33	22	15	15	24	12	18	8	−11	−9	0	5	5	−13	11	31	35
Clinton	Maximum	45	42	40	50	50	48	48	38	50	42	42	48	55	55	62	56	33	37	38	31	23	24	18	23	33	39	33	26	33	43	53
	Minimum	27	20	30	30	32	32	22	24	20	32	28	22	35	26	31	25	20	12	25	17	16	−8	−7	−8	0	9	7	−10	−9	....	37
Harrisonville §§	Maximum	40	37	30	48	50	35	42	33	47	37	42	47	50	53	53	36	30	32	36	26	19	12	15	22	24	33	20	24	34	45	48
	Minimum	19	20	20	17	32	32	24	33	22	24	32	22	22	30	28	35	15	14	16	20	15	10	−10	−10	1	0	5	−13	−12	23	33
Lamar §§	Maximum	47	48	50	57	56	36	47	40	52	39	42	53	55	56	66	40	31	37	39	30	30	16	22	25	39	35	28	32	39	53	57
	Minimum	25	23	25	24	25	36	25	21	24	35	33	24	25	29	28	38	26	19	19	19	19	16	3	5	12	11	26	1	4	32	39
Lamonte	Maximum	42	37	33	44	47	45	46	39	50	39	39	42	53	53	63	50	30	36	30	29	21	19	20	21	22	34	29	18	33	40	50
	Minimum	28	15	26	16	30	32	25	24	23	32	24	22	35	28	33	24	20	15	25	17	9	4	−16	−20	−11	−5	−2	−23	0	27	37
Marshall	Maximum	41	39	35	40	43	43	42	35	48	41	39	42	50	58	62	58	30	34	34	29	19	17	11	16	23	31	28	13	27	38	45
	Minimum	27	16	25	12	30	32	25	24	21	30	29	21	28	29	32	29	19	15	25	15	7	7	−14	−14	−2	5	6	−16	2	26	35
Warrensburg	Maximum	42	37	36	49	48	47	45	35	50	40	42	48	53	55	63	51	31	35	31	31	20	19	18	22	24	34	31	19	33	42	53
	Minimum	28	19	28	20	37	32	25	23	22	33	31	24	35	41	44	24	18	15	26	14	12	6	−8	−3	6	3	4	−14	7	29	37
Warsaw	Maximum	48	46	48	58	56	50	46	40	57	48	43	46	56	63	67	54	30	36	31	31	25	22	17	20	36	40	35	24	34	44	56
	Minimum	27	18	32	18	38	32	25	21	18	28	34	18	28	25	26	30	22	14	25	18	12	12	−13	−13	−4	5	4	−14	3	33	37
Northwest Plateau.																																
Avalon	Maximum	39	36	29	37	39	39	40	35	44	41	39	42	47	51	60	59	29	31	34	30	20	15	10	17	22	33	30	9	26	34	42
	Minimum	20	11	21	14	31	31	25	22	22	31	29	22	33	30	31	26	17	16	25	15	6	6	−10	4	0	5	3	−18	0	21	34
Grant City	Maximum	40	38	24	40	40	41	40	32	46	38	41	43	46	50	54	47	20	30	25	25	15	15	7	20	15	29	24	6	23	33	37
	Minimum	12	6	18	12	33	29	18	18	20	25	24	22	32	27	33	19	9	15	12	5	7	1	−11	−7	−1	3	−3	−19	3	19	23
Kansas City	Maximum	44	35	36	46	50	45	43	31	49	39	43	46	51	55	62	37	29	33	35	25	17	14	15	20	23	38	27	21	27	43	45
	Minimum	32	22	25	24	39	32	29	21	24	32	30	31	38	37	37	19	14	19	21	15	12	3	−1	5	14	12	−4	−16	18	26	35
Kidder §§	Maximum	37	29	27	40	40	33	37	33	48	35	44	47	53	54	60	35	27	30	32	22	14	9	7	18	18	33	7	13	28	41	38
	Minimum	30	12	22	18	36	31	25	20	26	33	28	34	33	33	34	35	20	16	29	14	11	4	−10	2	10	8	6	−15	2	28	35
Lexington §§	Maximum	42	32	32	42	45	34	44	30	48	35	42	45	51	55	61	38	30	32	35	27	16	15	15	16	20	36	11	14	26	36	43
	Minimum	27	18	27	18	36	32	27	23	23	34	32	23	38	33	35	35	19	17	25	17	11	10	−5	−1	4	6	10	−14	5	24	35
Maryville §§	Maximum	39	29	30	41	42	31	35	29	47	35	40	45	44	50	53	31	28	30	31	20	15	9	5	22	15	27	5	11	24	38	38
	Minimum	9	9	9	10	17	28	23	19	19	20	26	24	24	28	28	31	11	11	15	11	3	1	−11	−11	−3	−2	1	−18	−18	1	23
Oregon	Maximum	45	40	34	43	49	52	39	34	50	46	42	51	52	53	55	44	24	33	39	33	22	10	8	28	21	31	25	17	25	36	40
	Minimum	24	15	20	18	39	29	23	20	23	32	25	26	31	28	35	15	7	9	21	11	6	−1	−11	1	6	8	−5	−16	2	21	32
St. Joseph	Maximum	41	34	31	44	47	43	37	29	49	39	40	46	47	54	58	34	24	30	33	23	15	12	10	23	17	31	20	17	25	40	42
	Minimum	28	17	22	21	40	30	24	21	26	32	28	27	35	30	33	18	11	14	20	13	10	−3	−6	3	5	12	−8	−12	7	24	33
Trenton	Maximum	37	33	29	34	38	38	35	33	39	38	36	38	44	47	51	50	27	30	34	29	18	13	6	19	16	28	27	7	24	34	38
	Minimum	21	11	21	16	30	31	26	21	21	31	29	23	32	29	33	25	15	16	24	13	13	5	−8	−7	−5	8	2	−16	4	20	34

[illegible] etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers
Calgary
Medicine Hat
Battleford
Prince Albert
Qu Appelle
Swift Current
Minnedosa
Winnipeg
White River
Port Arthur
Sault Ste Marie
Montreal
Kalispell
Spokane
Walla Walla
Baker
Boise
Havre
Helena
Billings
Yellowstone Park
Williston
Devils Lake
Grand Forks
Bismarck
Moorhead
Duluth
Minneapolis
St Paul
Sheridan
Rapid City
Pierre
Huron
Green Bay
La Crosse
Madison
Milwaukee
Alpena
Saugeen
Pocatello
Lander
Winnemucca
Valentine
Yankton
Sioux City
Charles City
Dubuque
Chicago
Grand Haven
Grand Rapids
Salt Lake City
Cheyenne
North Platte
Omaha
Des Moines
Davenport
Grand Junction
Denver
Lincoln
Concordia
St Joseph
Hannibal
Keokuk
Springfield
Leadville
Canon City
Pueblo
Modena
Durango
Topeka
Kansas City
Columbia
Dodge City
Wichita
Santa Fe
Flagstaff
Amarillo
Oklahoma
Fort Smith
Bentonville
Abilene
Fort Worth
Roswell
Tucson
El Paso
Dallas
Shreveport
Vicksburg
Jackson
Del Rio
San Antonio
Houston
Galveston
Corpus Christi
Brownsville
Cape Henry
Nassau
Havana
Key West
0.5
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2
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Stack
M S

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

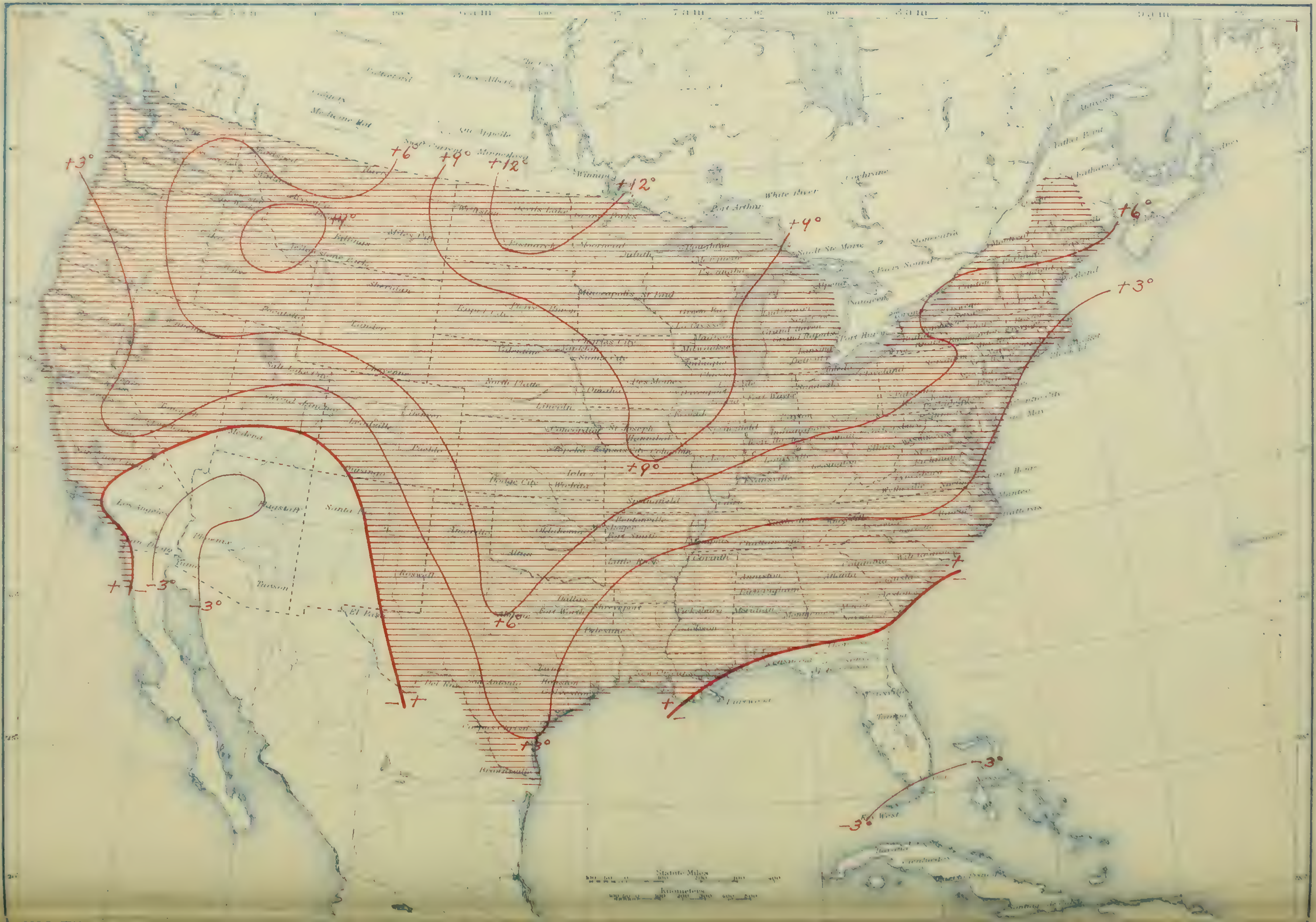
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

FEBRUARY, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 19, 1915.

Departure of the Mean Temperature from the Normal, February, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

ol. XIX. COLUMBIA, MO., FEBRUARY, 1915. No. 2

GENERAL SUMMARY.

February, 1915, was among the mildest of its name during e past 27 years. It was mostly cloudy, but not unusually et, although precipitation was well distributed and ample, curring in short periods at regular intervals. There was no vere cold at any time. The uniformly mild conditions with nple moisture was favorable for the wheat crop; and the usu- farm work was carried on without much interference. Stock the range also fared well.

The mean temperature was below the normal on not more an two or three days during the entire month, and on those ys the deficiency was slight. From about the 9th to the 4th, and 16th to the 23rd the positive departures were unually marked. The maximum temperatures, while quite gh, were within the limits of previous years, but the miniium was the highest on record. It is also of interest to note at the warmth was appreciably greater in the northern than the southern half of the State.

The precipitation occurred at regular intervals, and for the tate as a whole it was above normal; but as a matter of fact e excess in the western half of the State was more than sufient to overcome a slight deficiency that occurred in counties ong the Mississippi River from about Pike to Pemiscot.

Thunderstorm showers occurred on several dates.

PRESSURE.

The atmospheric pressure waves that crossed the State from me to time during the month differed but little from the usual pes. The monthly mean sea-level pressure, 8 stations reportg, was 30.05 inches, or 0.06 inch below normal.

TEMPERATURE.

The monthly mean temperature, 70 stations reporting, was .4 . The mean departure from the normal for 53 stations ving 10 or more years' record was plus 8°, which is the gest excess for any February during the past 27 years. The ghest local monthly mean, 45.3°, occurred at Caruthersville, d the lowest, 32.6°, at Maryville. The highest temperature corded during the month was 72° at Belle on the 12th, and e lowess was 7° at Rolla and Tarkio on the 8th. The northn half of the State was slightly warmer than the southern lf, but the temperature excess was large in all divisions, as own in the following: northeast plain 9.6°; southeast lownds, 6.8°; Ozark plateau, 6.8°; southwest plain, 8.2°, and rthwest plateau, 8.8°. The average number of days with mperature 32° or lower was 17.

HUMIDITY.

The mean relative humidity was slightly above the normal the west and north, while generally south of the Missouri iver it was somewhat below normal.

PRECIPITATION.

The average precipitation for the State, 82 stations reportg, was 3.18 inches. The departure from the normal for 67 ations having 10 or more years' record was plus 0.81 inch. he monthly averages and departures for the five divisions were follows: northeast plain, 2.33 inches, which is about ormal; southeast lowlands, 3.39 inches, excess 0.08 inch: zark plateau, 3.23 inches, excess 0.65 inch; southwest plain, .81 inches, excess 1.80 inches, and northwest plateau, 3.12 inches, excess 1.53 inches. The greatest local monthly precipitation was 4.94 inches at Warsaw, and the least was 0.85 inch at Tarkio.

The snowfall was much below the normal for the State as a whole, but there were some quite heavy local amounts. The greatest monthly amout was 16 inches at Avalon.

The average number of days with 0.01 inch or more precipitation was 8.

WIND.

The prevailing winds were from the southeast. There was somewhat more wind than usual, the average hourly velocity being about two miles greater than normal. Fresh to strong winds prevailed on the 4th, 5th, 14th and 23rd.

SUNSHINE AND CLOUDINESS.

The sunshine for the State as a whole was about 20 percent below normal. The average number of clear days was 9, partly cloudy 5, and cloudy 14.

MISCELLANEOUS PHENOMENA.

Fogs-1st, 2d, 9th, 11th, 12th, 20th and 22d.
Hail-4th.
Halo, lunar-4th, 26th, 27th and 28th.
Halo, solar-7th, 8th, 9th, 13th, 26th, 27th and 28th.
Thunderstorms- 4th, 13th, 22d and 23rd.

ERRATA FOR JANUARY, 1915.

Conception-The number of partly cloudy days should be 12.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity	Miles per hour.	Direction.	Date.
Columbia	30.03	81	......	102	34	7,142	10.6	34	sw	14
Hannibal	30.03	80	......	......	......	7,432	11.6	34	sw	23
Kansas City	30.02	81	77	132	44	9,781	14.6	39	se	4
St. Joseph	30.03	84	74	100	33	7,595	11.3	40	w	5
St. Louis	30.06	78	71	118	39	10,795	16.1	49	sw	23
Springfield	30.05	85	65	140	46	9,789	14.6	38	sw	22
Cairo, Ill	30.10	76	68	......	......	7,314	10.9	36	se	4
Keokuk, Iowa	30.04	85	80	108	36	5,416	8.1	27	w	23

COMPARATIVE DATA FOR FEBRUARY.

YEAR	Temperature				Precipitation			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest 24 hours	Av'e. No. days with .01 inch or over
1888	33.0	+2.0	73	−11	2.04	−0.28	......	7
1889	29.3	−1.7	73	− 9	2.57	+0.25	......	7
1890	35.5	+4.5	81	− 7	2.24	−0.08	......	7
1891	32.7	+1.7	76	− 8	2.28	−0.04	......	6
1892	37.7	+6.7	71	2	4.15	+1.83	......	9
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	6
1894	30.8	−0.2	72	−12	2.52	+0.20	2.60	6
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	5
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	5
1897	34.8	+3.8	74	−15	2.30	0.02	3.60	7
1898	35.4	+4.4	78	− 9	1.62	−0.70	2.90	5
1899	20.4	−10.6	72	−32	2.17	0.15	4.30	6
1900	26.2	−4.8	70	16	3.92	+1.60	2.85	10
1901	28.1	−2.9	76	19	1.63	−0.69	2.36	6
1902	24.0	−7.0	72	17	1.50	−0.82	2.35	5
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	7
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	5
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	8
1906	33.7	+2.7	73	−13	2.28	−0.04	2.40	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	6
1908	35.6	+4.6	78	7	4.32	+2.00	4.28	9
1909	38.8	+7.8	71	1	3.38	+1.06	2.50	9
1910	28.3	−2.7	72	24	1.98	−0.34	3.00	6
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	8
1912	28.3	−2.7	72	12	2.45	+0.13	3.20	6
1913	29.8	−1.7	78	− 9	2.21	0.18	4.78	7
1914	28.3	−3.2	75	11	2.71	+0.42	2.80	7
1915	39.4	+8.0	72	7	3.18	+0.81	2.65	8

Climatological data for February, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted	With precip., .01 inch or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	2.69	−0.03	0.80	8.6	9	6	1	21	nw	C. Randecker.
Brunswick	Chariton	652	36	37.5	+ 9.1	64	10	17	7+	38	3.44	+1.48	1.22	5.0	8	6	1	21	se	Louis Benecke.
Columbia	Boone	784	26	39.4	+ 9.3	69	12	19	8	30	2.14	+0.01	0.66	2.4	10	4	7	17	se	U. S. Weather Bureau.
Fayette	Howard	725	31	37.2	+ 8.1	67	12	16	6	32	2.82	+0.72	0.95	4.5	8	10	1	17	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	40.2	+10.6	70	12	12	8	32	2.20	+0.06	0.62	T.	13	8	6	20	s	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	2.04	+0.38	0.78	0.8	7	5	6	17	se	J. W. Pulham.
Hannibal	Marion	534	23	37.8	+ 8.7	65	12	16	8	30	1.94	+0.34	0.58	3.8	9	6	4	18	sw	U. S. Weather Bureau.
Hermann	Gasconade	483	42	....	.....	....	....	....	....	....	1.28	−1.18	0.52	1.0	10	6	2	20	e	C. T. Maushund.
Jefferson City	Cole	628	30	41.2	+10.4	69	10	19	8	43	2.56	+0.32	0.68	1.0	8	7	0	21	s	Miss Emma Swift.
Keytesville	Chariton	...	3	....	.....	....	....	....	....	....	3.71	......	1.11	2.5	6	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	39.0	+10.9	67	12	16	9	27	1.81	−0.68	0.51	4.3	9	10	5	13	se	J. T. Farrell.
Macon	Macon	881	18	38.6	+12.8	63	12	14	8	43	2.52	+0.37	0.82	T.	7	5	7	16	sw	John A. Cook.
Mexico	Audrain	797	38	37.6	+ 9.0	69	12	16	9+	46	2.26	−0.24	0.62	2.8	13	8	1	19	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	40.0	+ 8.3	71	12	17	8	30	1.96	−0.62	0.75	1.0	7	4	9	15	se	E. L. Steines.
Palmyra	Marion	652	14	37.4	.....	68	13	15	8+	40	1.86	−0.38	0.49	0.5	9	5	6	17	se	W. B. Markell.
St. Catharine	Linn	914	3	36.4	.....	58	11	14	6+	25	2.14	......	0.61	2.5	9	5	11	12	ne	L. D. Baker.
St. Charles	St. Charles	614	38	39.6	+ 8.1	71	12	19	8	31	1.50	−1.48	0.65	1.0	6	3	9	16	s	L. C. Saeger.
St. Louis(1)	St. Louis City	717	45	40.5	+ 7.0	69	12	21	8	26	2.30	−0.45	1.43	1.6	8	5	8	15	s	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	39.1	.....	68	12	21	8	26	2.59	......	1.40	1.9	8	6	9	13	se	St. Louis University.
Steffenville	Lewis	576	23	38.6	+11.9	65	12	15	8	29	2.62	+0.58	0.55	2.0	10	5	9	14	s	Frank Hall.
Sublett ††	Adair	1,000	35	35.8[d]	+11.0	....	....	....	....	....	.....	....	....	....	...	8	8	12	nw	Lewis Spriggs.
Unionville	Putnam	1,072	23	34.0	+10.0	58	17	10	8	32	3.22	+1.23	1.15	4.5	10	6	3	19	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	17	8	....	1.74	......	....	....	....	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	36.8	+ 7.6	70	12	17	8+	39	2.14	−0.40	0.78	T.	8	3	11	14	s	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	4.20	+1.84	1.30	1.0	8	9	1	18	s	D. L. Albert
Cardwell	Dunklin	...	5	44.2	.....	65	11+	24	9	27	2.39	......	0.80	1.0	6	12	2	13	s	E. M. Perry.
Caruthersville	Pemiscott	...	25	45.3	+ 7.9	66	11+	26	8+	27	2.92	−1.27	1.31	T.	7	12	3	13	e	H. E. Averill.
Doniphan	Ripley	440	11	42.2	+ 5.3	64	12	20	9	34	4.64	+0.84	1.90	3.2	9	10	4	14	se	W. W. Martin.
Jackson	Cape Girardeau	458	25	41.8	+ 7.0	67	12	23	8+	31	2.89	−0.43	1.37	3.0	5	9	10	9	s	L. M. Bean.
Marble Hill	Bollinger	420	24	42.0	+ 7.3	68	12	19	9	40	3.67	0.00	1.75	T.	6	10	8	10	s	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	3.83	−0.38	1.50	....	8	11	2	15	se	Miss Josie Smith.
Patton (near) ‡‡	Bollinger	....	1	....	.....	....	....	....	....	....	3.00	......	1.80	1.5	5	16	0	12	s	Christian Seabaugh
Poplar Bluff	Butler	333	12	41.8	+ 6.8	66	12	22	8+	30	3.74	+0.08	2.05	0	6	16	2	10	....	M. S. Wiseheart.
Sikeston	Scott	328	15	43.1	+ 8.1	65	12+	24	9	26	3.06	−0.57	1.25	0	9	8	10	10	s	H. B. Derr.
Cairo, Ill	Alexander, Ill	359	43	42.7	+ 5.1	63	13	25	8	22	2.90	−0.43	1.48	0.1	7	7	4	17	se	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.64	−1.27	0.52	0.5	8	10	2	16	nw	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	2.13	......	0.53	5.0	7	7	4	17	w	Mrs. Nellie V. Houser
Belle	Maries	1,000	24	42.2	+10.5	72	12	18	8	34	4.00	+1.37	2.00	2.8	4	5	10	13	w	A. J. Wofford.
Birchtree	Shannon	1,200	22	40.8	+ 6.8	63	10+	20	8	41	3.72	+0.83	1.18	2.5	6	14	5	9	nw	V. H. Kirkendall.
Bolivar	Polk	1,020	28	41.4	+ 8.0	67	12	18	8	34	2.26	+0.95	0.73	7.0	7	11	5	12	nw	A. C. Fink.
Cassville	Barry	1,500	5	42.2	.....	66	10	15	8	39	3.42	......	1.38	1.5	6	14	1	13	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	40.6	.....	69	17+	23	2	33	1.74	......	0.87	4.1	6	13	6	9	n	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	....	.....	68	10	....	....	....	4.64	+2.66	1.47	3.0	8	17	1	10	w	H. E. Dean.
Duncan	Webster	...	3	38.2	.....	58	10+	16	2	40	3.75	......	1.60	9.5	12	10	7	11	s	C. A. Mingus.
Eldon	Miller	934	15	40.8	.....	71	12	18	8	31	2.48	−0.24	0.79	6.0	10	5	12	11	sw	Charles A. Kellogg.
Fruit City	Reynolds	1,150	3	41.1	.....	65	12	22	8	29	4.26	......	1.93	1.0	7	14	5	9	w	R. C. Walton.
Gano ‡‡	Dent	...	12	40.2	+ 6.4	68	12	17	8	33	2.72	−0.10	1.10	4.8	9	11	3	14	se	A. C. Leach.
Goodland	Iron	1,000	11	40.4	+ 7.4	68	12	14	9	38	3.16	+0.06	1.15	1.0	6	15	1	12	s	F. M. Adams.
Hollister	Taney	1,000	7	41.6	.....	70	12	18	8	42	4.50	......	1.95	5.5	8	16	0	12	ne	W. P. Chapmann
Houston	Texas	1,280	23	41.0	+ 7.7	65	12	18	8	33	3.03	+0.55	1.00	4.6	7	14	3	11	se	R. F. Harmon.
Ironton	Iron	925	38	40.6	+ 7.2	69	12	16	9	34	3.35	−0.12	1.45	1.5	6	5	6	17	nw	W. H. Delano.
Koshkonong	Oregon	911	15	41.8	+ 5.5	65	12	22	3+	31	4.40	+1.23	1.31	4.0	9	9	6	13	nw	R. M. Hitt.
Lebanon	Laclede	1,265	27	40.4	+ 6.7	67	12	24	3+	30	3.76	+1.62	0.95	3.5	10	5	7	16	se	O. L. Weissgerber.
Lockwood	Dade	1,088	21	39.9	.....	60	12+	22	8	24	3.93	+1.72	0.93	5.5	8	10	5	13	se	C. S. Crow.
Mountain Grove	Wright	1,490	17	38.8	+ 5.6	64	12	19	8	33	2.52	−0.12	0.72	3.5	10	9	5	14	se	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	40.6[d]	+ 7.3	....	....	....	....	35[d]	3.56	+0.72	1.17	9.0	7	12	1	15	se	J. K. White & Son.
Neosho	Newton	1,083	33	42.8[a]	+ 6.9	68	10	18	8	37	3.47	+0.95	0.72	6.0	10	13	2	13	sw	W. O. Buck.
Rolla	Phelps	1,139	34	38.6	+ 3.4	68	12	7	8	40	2.76	+0.32	0.96	3.5	8	10	10	8	se	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	39.8	+ 6.2	65	12	22	8	28	2.66	+0.39	0.96	6.0	9	11	6	11	se	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	2.77	+0.76	0.90	7.2	5	16	1	11	w	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	7	40.8	.....	65	11	18	6	34	3.24	......	1.01	T.	8	9	2	17	nw	Darby Fruit Farm.
Clinton	Henry	800	29	41.2	.....	70	12	12	16	45	4.80	+2.84	1.20	6.0	9	6	9	13	se	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	37.7	+ 8.2	64	11	17	9	34	3.59	+1.42	1.00	4.0	10	7	1	20	e	A. J. Sharp.
Lamar	Barton	964	35	39.8	+ 5.7	66	11	21	6	43	3.60	+1.25	0.99	2.5	10	10	3	15	se	E. H. Adams.
Lamonte	Pettis	863	27	39.3	.....	65	12	17	8	36	3.84	+1.82	1.10	9.0	7	11	6	11	nw	J. Ed. Hall.
Marshall	Saline	779	25	38.8	+10.1	68	12	13	8	43	3.26	+1.30	0.74	2.5	8	11	3	14	nw	Prof. W. H. Black.
Nevada	Vernon	860	22	39.4	.....	61	12	20	25	31	3.26	+1.08	0.80	2.5	8	10	11	7	se	C. Jewell.
Warrensburg	Johnson	883	37	39.7	+ 8.8	65	12	18	6	30	4.84	+2.75	1.49	6.5	10	7	8	13	nw	Geo. H. Collins.
Warsaw	Benton	883	11	41.7	+ 8.1	68	11+	17	8	37	4.94	+1.96	0.85	15.5	10	12	6	10	se	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	2.76	......	1.14	2.4	8	5	3	20	nw	John W. Cauthorn
Northwest Plateau.																				
Avalon	Livingston	....	30	37.8	+10.9	60	10+	15	6	28	3.35	+1.07	1.20	16.0	4	11	6	11	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	35.0	+ 9.1	59	10+	11	8	29	2.75	+1.37	1.10	6.0	5	8	3	17	se	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	3.36	......	1.08	3.0	8	8	1	19	s	Hocey O. Dupy
Conception	Nodaway	982	31	33.2	+ 7.1	58	11	9	6	26	2.23	+0.99	0.56	6.0	10	5	9	14	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	33.8	+ 7.8	58	11	11	6	34	2.60	+1.37	1.12	4.0	8	6	3	19	se	W. H. Campbell.
Kansas City	Jackson	963	27	38.2	+ 8.3	63	11	16	6	25	2.87	+1.28	1.15	6.5	12	6	6	16	nw	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	36.2	+ 9.8	60	10+	13	6	28	3.74	+2.15	1.02	12.5	7	6	7	15	nw	J. F. Sharp.
Lexington	Lafayette	813	34	38.2	+ 9.6	63	12	17	8	30	3.60	+1.50	1.08	7.5	10	9	0	19	s	J. W. Keithley.
Liberty	Clay	864	27	37.1[b]	+ 8.2	....	....	....	....	....	3.68	+2.04	0.75	4.0	11	8	6	14	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	32.6	+ 9.6	58	11	8	7	36	3.81	+2.58	0.97	7.0	9	11	0	17	s	J. R. Brink.
Oregon	Holt	1,113	60	35.8	+ 7.8	59	11	11	6	28	3.26	+1.57	0.92	10.5	8	7	5	16	nw	Tom Curry.
St. Joseph	Buchanan	967	44	35.7	.....	62	11	13	6	28	2.63	+1.45	0.58	7.7	13	6	6	16	nw	U. S. Weather Bureau
Tarkio	Atchison	....	1	33.1	.....	53	17	7	8	28	0.85	......	0.25	6.5	5	7	5	16	ne	John F. Frazier
Trenton	Grundy	812	21	35.8	+ 8.5	58	11	13	6	23	2.70	+1.01	1.24	3.1	9	8	3	17	e	W. H. Estes.
State means and extremes		....	....	39.4	+ 8.0	72	12	7	8	46	3.18	+0.81	2.05	4.1	8	9	5	14	se	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

+ Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for February, 1915.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
ot.ville	Missouri	.25	.80	.06	T.									.20	.08						.10	.46	.09	.65				T.					2.69
nswick	Grand	.25	.63		.02									.31							.07	.56		1.22				.38					3.44
umbia**	Missouri	.43	.11		.05	T.							.06	.17						.05	.10	.44	.66		T.		.07	T.					2.14
yette	do	.95	.05		T.									.24						.06		.56	.73	.03			.20						2.82
lton	do	.25	.18	.01	.01									.21	.08						.02	.62	.60	.16	.01		.04	.01					2.20
rin	Mississippi	.78			.08									.17							.01	.65	.11	.24									2.04
nnibal**	do	.27	.24		.07	T.	T.						T.	.25						.01	.13	.49	.47	T.	.01								1.94
rmann ‖	Missouri	.06	.06	.07	T.	.02	T.							.04	.09						.01	.36	T.	.52				.05					1.28
ferson City ‖	do	.30	.40			.10									.21						.12	.65		.68					.10				2.56
ytesville	Chariton	.76		.17										.45							.52			1.11				.70					3.71
uisiana	Mississippi	.20	.25			.02								.24	.03						.03	.27	.26	.51									1.81
con	Chariton	.35	.60	.05	T.	T.								.12	T.						T.	.42	.16	.82	T.			T.					2.52
xico ‖	Mississippi	.09	.47	.10	.02	.15								.01	.15						.01	.50	.05	.62	.01			.08					2.26
kfield	Meramec	.04	.03		.25	T.								.43	.04					T.		.42	.75				T.						1.96
myra ‖	Mississippi	.19	.09	.18	.09									.02							.21	.48	.11	.49	T.								1.86
Catherine	Grand	.42	.26		.04	T.								.26						T.	.04	.38	.12	.61	.01		T.						2.14
Charles	Missouri		.01		.33	T.								.28	.04							.18	.65	T.									1.50
Louis (1)***	Mississippi	T.	.12		.24	T.	T.							.34						.01	.01	.15	1.42	.01	T.	T.							2.30
Louis (2)	do	T.	.19		.29	T.	T.							.43						.01	.02	.23	1.40	.02									2.59
enville	do	.55	.42		T.	T.							.10	.15	.02						.20	.53	.20	.05	.40								2.62
lett	do																																
onville ‖	Grand	.55	.50	.30	.26	T.	.04							.08							T.	.30	.25	.90	.04								3.22
ndalia	Mississippi																																1.74‡
renton ‖	do	.21	.04	.11		.17	T.								.38						.01	.44		.78				T.					2.14
Southeast Lowlands.																																	
dwell	Mississippi		.03		.65	T.								.76					T.		.03		.80						.12				2.39
uthersville	do		.05		.28	.20								.55						T.	T.	.41	T.	1.31					.12				2.92
ip'an	Black		.12		.65									.53	.02						.11	.91	1.90	.16					.24				4.64
kson	Mississippi		.12		.50									.48								.42	1.37										2.89
ble Hill	do	.05			.65									.21								.76	1.75	.25					T.				3.67
w Madrid ‖	do	.70	.02	.05		.55									.72							.17	.12	1.50									3.83
ton (near)	do	.15			.30																	.50	1.80	.25									3.00
plar Bluff	Black	.14		.56										.75								2.05		.13					.11				3.74
eston	Mississippi		.07		.39	.01								.55	.01							.46	.31	1.25					.01				3.06
ro, Ill.**	do	.01	.08		.42	T.								.57								.34	1.46	.02					T.				2.90
Ozark Plateau.																																	
ington ‖	Gasconade	.52	.11			.20								.22							.07	.15	.22		T.				.15				1.64
gnell	Osage		.50			.01								.25							.10	.49		.53					.25				2.13
ie	Meramec	2.00	.20										.80										1.00										4.00
chtree	Black		.05		.52									.81								.86	1.18					T.	.30				3.72
ivar	Osage	.43	.10											.60						.17		.56	.73						.30				2.29
sville	White																			1.08	.27	.38	1.38					.10	.21				3.42
cker	Gasconade		.10											.24							.34		.87					.15	.04				1.74
n	Neosho	T.		.07									T							.80	.38	.51	.94	.04				1.47	.43				4.64
ncan	Osage	.40	.08		.05	.02								.71						.10	.06	.36	1.60	.05				.16	.16				3.75
on	do	.17	.06		.04									.38							.28	.79	.48	.11				.10	.17				2.48
it City	Black		.10		.60									.65							.06	.80	1.93	.12									4.26
io	Meramec	T.	.05		.24									.46	.08							.36	.95	.15				.05	.38				2.72
dland	Black		.10		.45									.75								.65		1.15					.06				3.16
llister	White	.60	.05										.95							.25	.20		1.95					.30	.20				4.50
uston	Gasconade	.35			.10									.66						T.	T.	.37	1.00	.15				.15	.25				3.03
nton	Mississippi		.10	.05		.40	T.							T.	.50						T.	.85	T	1.45					T.				3.35
konong	Black	.16	.20		.66									.73	.03					T.	T.	1.03	1.31					.08	.20				4.40
anon ‖	Osage	.43	.32		.13									.54	.11						.30	.52	.08	.95					.38				3.76
kwood	do	.41	T.											.66						.38	.22	.58	.93					.70	.05				3.93
untain Grove	White	.28	.12		.07	.08								.12	.22					T.	.22	.72	.35						.34				2.52
unt Vernon	Neosho	.20	T.											.60						.33	.21	.10	1.17					.60	.35				3.56
sho	do	.12	T.		.01								T.	.63						.57	.32	.55	.72	.05	T.			.28	.22				3.47
la	Meramec	.18	.15			T.								.31	.32						.08	.51	T.	.96					.25				2.76
ingfield ***	White	.16	.11		.02									.55						.31	.24	T.	.96	T.				.29	.02				2.66
eatland	Osage	.12												.50							.65		.90					.60					2.77
Southwest Plain.																																	
oret	Osage	T.			.30								T.	.45						.15	.10	.68	1.01	.40					.15				3.24
nton	do		.10	.30	.15								.80								.30	.70	.90	1.20					.35				4.80
rrisonville ‖	do	.23	.20		.30									1.00						.06	.08	.56	.01	1.00					.15				3.59
mar	Neosho	.32	T.	.03										.52						.08	.18	.66	.14	.99				.02	.66				3.60
monte	Missouri	1.10												.65							.60		1.05	.30			T.	.04	.10				3.84
shall	do	.34	.50									T.		.50						.04	T.	.65	.44	.74			.05						3.26
ada	Osage				.24									.65						.16	.22	.52	.80	.42					.25				3.26
rrensburg	Missouri	1.49	.19			T.								.42						.10	.08	.68	.81	.71				.07	.29				4.84
saw	Osage	.85	.17			T.								.76						.23	.38	.82	.62	.36				.13	.62				4.94
verly	Missouri		.40											.35							.11	.73	.01	1.14			.01	.01					2.76
Northwest Plateau.																																	
lon	Grand	.80												.35								1.20					1.00						3.35
any	do	.72				T.							T.	.33						T.	T.	.55	.05	1.10									2.75
llicothe	do	.50	.83		.10									.15							.03	.29		1.08				.38					3.36
ception	Missouri	.17			.27								.05	.56	T.			T.	.10	.05		.56	.11	.06			.30	T.					2.23
nt City	Grand	T.	T.	T.	.18	T.	T.					T.	T.	.60	T.				.10	.12	.08		1.12				.10	.30					2.60
sas City***	Missouri	.36			.02								.07	.48						.10	.24	.19	1.03	.12			.02	.18	.06				2.87
der ‖	Grand	.80	.27		.31									.52								.41		1.02				.41					3.74
ington ‖	Missouri	.72	.48		.13									.52						.03	.09	.37		1.08				.15	.03				3.60
erty	do	.61	.20	.20										.50					.20	T.		.54	.16	.75	.09		.35	.08					3.68
yville ‖	do	.96			.10									.59	T.				.15		.14	.51	T.	.97	.02			.37					3.81
gon	do	.92											T.	.36					.04		.10	.61	.25	.53			.45	T.					3.26
Joseph**	Missouri	.37	T.		.05	T.		T.					.06	.46	T			.10		.06	.20	.17	.40	.18			.54	.03	.01				2.63
kio	do													.23					.10		.10			.17				.25					0.85
nton	Grand	.56	T.	.16	T.	T.							.24							.11	.19	.06	1.24	.03			.11						2.70

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the e of observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 period, midnight to midnight.

**Precipitation in the next following measurement.

‡ Separate dates of fall not recorded.

Daily temperatures for February, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	37	27	43	58	33	32	36	42	45	64	62	63	59	46	40	[illegible]	57	55	49	51	50	43	37	34	44	[illegible]	34	43			
	Minimum	34	24	22	25	31	20	17	17	17	26	35	51	49	32	30	23	33	29	36	39	43	42	33	[illegible]	29	29	[illegible]	[illegible]			
Columbia	Maximum	48	32	38	56	37	31	34	28	45	65	64	69	61	49	34	51	57	55	51	51	42	50	47	35	44	[illegible]	[illegible]	40			
	Minimum	31	23	23	37	21	20	21	19	26	35	49	55	40	34	26	23	36	35	40	42	43	45	34	39	25	29	[illegible]	25			
Fayette	Maximum	43	30	35	57	32	28	31	38	43	63	63	67	59	47	34	49	57	57	50	51	53	44	42	32	35	31	[illegible]	[illegible]			
	Minimum	30	19	20	32	21	16	21	17	21	31	44	50	37	32	27	22	33	34	37	40	40	42	32	28	23	27	28	28			
Hannibal	Maximum	39	33	35	46	38	30	32	35	40	60	62	65	57	46	37	47	53	50	50	50	39	49	36	28	37	40	36	40			
	Minimum	33	24	21	35	22	20	22	16	21	30	50	54	41	35	30	24	32	34	36	41	41	42	32	43	28	[illegible]	27	27			
Jefferson City §§	Maximum	50	38	50	59	43	36	36	44	49	69	61	62	56	55	42	54	66	64	58	58	62	55	47	45	45	47	44	[illegible]			
	Minimum	38	29	23	28	32	23	23	19	22	23	34	44	48	32	28	22	23	31	35	41	42	46	36	33	26	28	[illegible]	29			
Macon	Maximum	36	28	38	53	32	29	33	40	44	62	60	63	61	44	36	50	57	54	55	50	50	45	36	35	42	37	36	42			
	Minimum	34	28	19	23	30	18	16	14	15	19	32	49	45	34	36	20	22	32	33	35	41	42	33	30	35	26	24	27			
Mexico §§	Maximum	30	37	38	46	33	31	35	39	44	62	63	69	55	50	36	50	55	53	53	53	51	48	36	34	35	30	[illegible]	42			
	Minimum	36	37	22	24	32	22	20	17	16	16	34	55	55	33	37	22	22	32	33	34	41	42	35	32	26	25	27	27			
Oakfield	Maximum	50	36	38	47	47	32	36	40	42	62	62	71	58	55	47	48	53	52	54	57	49	52	55	58	45	37	43	43			
	Minimum	34	30	25	31	29	24	25	17	22	22	16	54	52	37	31	23	31	32	37	41	40	43	36	31	27	26	29	29			
St. Catharine	Maximum	38	34	30	53	45	28	33	38	42	53	58	55	56	45	36	46	54	52	48	49	48	46	44	30	40	[illegible]	30	43			
	Minimum	32	22	17	28	23	11	22	14	20	32	43	39	43	30	29	21	31	35	35	40	44	40	32	28	24	25	25	28			
St. Louis (1)	Maximum	52	37	35	46	46	33	35	37	43	58	61	69	57	53	40	44	51	50	54	53	49	55	55	44	48	[illegible]	36	[illegible]			
	Minimum	34	29	28	33	31	25	27	21	28	32	46	54	47	36	32	30	34	34	46	44	40	36	37	33	32	34	[illegible]	[illegible]			
Unionville §§	Maximum	34	26	35	46	30	24	28	38	44	48	54	52	50	38	40	50	58	57	48	50	48	45	38	36	40	34	40	48			
	Minimum	32	20	16	22	28	14	12	10	14	20	36	33	38	29	26	20	26	34	30	32	36	37	33	26	22	[illegible]	[illegible]	24			
Warrenton §§	Maximum	45	34	38	46	33	31	34	39	42	60	70	....	56	52	35	50	55	56	55	55	50	53	58	56	52	36	[illegible]	[illegible]			
	Minimum	37	29	24	25	31	22	22	17	17	21	33	....	52	36	31	24	25	31	31	34	40	38	36	32	26	24	27	25			
Southeast Lowlands.																																
Cardwell	Maximum	53	38	50	46	50	42	47	44	48	54	65	65	62	60	55	54	60	55	57	65	64	61	58	60	54	50	44	40			
	Minimum	38	30	27	44	37	32	27	26	24	28	38	53	54	44	28	28	34	40	39	40	38	37	38	38	39	28	30	31			
Caruthersville	Maximum	52	38	48	55	50	44	52	46	49	66	66	66	66	60	58	52	58	60	54	[illegible]	51	61	60	50	[illegible]	52	42	[illegible]			
	Minimum	38	32	31	36	39	32	27	26	26	34	46	50	52	45	36	32	31	36	41	42	45	49	42	39	36	28	35	35			
Doniphan	Maximum	52	38	42	48	48	40	48	45	45	60	62	64	58	57	55	50	53	....	58	51	51	54	57	45	53	52	42	40			
	Minimum	37	30	25	28	35	29	25	22	20	26	46	51	52	40	32	24	25	....	35	44	40	48	38	38	25	26	24	32			
Jackson	Maximum	55	40	36	39	50	38	42	39	50	55	60	67	65	59	55	50	57	58	50	52	52	55	60	48	45	42	39	42			
	Minimum	40	29	29	33	34	31	25	23	23	25	32	50	53	42	28	25	27	27	41	42	39	46	41	37	31	29	28	32			
Marble Hill	Maximum	51	45	40	45	46	39	31	44	45	59	61	68	61	57	55	55	53	55	55	48	46	58	57	48	46	45	40	39			
	Minimum	40	25	37	34	35	30	20	25	19	19	45	51	53	41	31	41	22	31	37	40	38	48	40	35	30	25	32	29			
Ozark Plateau																																
Birchtree	Maximum	51	33	43	47	45	....	43	47	46	63	60	63	57	56	49	....	54	58	57	[illegible]	49	52	54	46	50	49	43	37	...	...	...
	Minimum	31	25	24	36	30	....	23	20	22	22	24	46	48	34	28	....	28	36	41	40	35	46	35	33	27	24	29	27	...	...	...
Cassville	Maximum	49	50	54	65	52	51	45	50	55	66	64	52	56	47	59	59	60	59	50	59	54	55	50	51	58	57	42	48	...	...	...
	Minimum	27	21	22	42	28	23	22	15	23	27	51	43	29	24	30	36	25	38	41	26	42	31	31	22	27	25	26	[illegible]	...	...	...
Duncan	Maximum	49	29	39	47	47	29	32	38	39	58	57	58	58	54	46	52	56	52	53	47	56	57	52	34	40	44	44	34	...	...	...
	Minimum	28	16	22	37	28	22	25	26	19	18	41	36	46	45	26	21	29	33	41	39	41	32	32	32	20	25	25	25	...	...	...
Eldon	Maximum	48	32	43	57	40	34	35	41	50	67	67	71	65	53	49	48	61	63	60	50	56	51	53	40	45	40	41	41	...	...	...
	Minimum	28	21	21	37	27	27	25	18	20	32	44	50	41	26	26	22	31	32	38	40	41	38	34	31	20	28	27	26	...	...	...
Fruit City	Maximum	49	34	42	46	46	35	40	43	44	60	60	65	56	55	48	52	53	59	52	51	47	[illegible]	54	42	40	40	42	[illegible]	...	...	...
	Minimum	34	27	26	37	32	26	26	22	23	31	44	52	42	38	30	27	30	32	41	41	42	40	38	35	30	32	31	29	...	...	...
Cano	Maximum	50	31	46	48	46	33	34	40	48	61	61	68	56	55	50	55	57	59	54	58	49	51	54	37	45	40	40	38	...	...	...
	Minimum	31	25	23	26	29	23	24	17	18	34	46	51	49	35	27	26	32	34	41	42	39	41	34	33	20	21	28	26	...	...	...
Hollister	Maximum	38	32	52	62	42	38	46	42	52	36	66	70	64	58	50	62	58	60	50	52	56	54	36	48	52	56	38	34	...	...	...
	Minimum	34	28	26	42	34	26	32	18	20	30	32	[illegible]	50	36	32	20	28	32	42	40	44	42	36	36	27	30	34	[illegible]	...	...	...
Ironton §§	Maximum	50	33	43	47	40	36	39	43	46	62	61	69	56	57	40	51	56	60	55	54	48	55	42	42	41	51	35	43	...	...	...
	Minimum	41	29	25	34	39	27	24	20	16	28	44	50	52	38	30	18	23	28	31	[illegible]	39	41	38	35	30	21	35	30	...	...	...
Lebanon	Maximum	33	26	38	55	37	40	50	43	48	65	65	67	60	42	47	49	60	58	57	55	55	37	35	38	48	50	36	33	...	...	...
	Minimum	33	26	24	33	30	30	32	31	25	35	35	50	48	35	26	24	33	38	44	43	42	27	33	33	26	34	35	26	...	...	...
Mountain Grove	Maximum	38	35	46	49	30	34	42	46	46	56	56	64	57	54	53	56	54	56	48	54	50	48	38	41	47	50	35	36	...	...	...
	Minimum	35	26	21	35	30	22	23	19	21	26	36	46	47	32	26	23	26	31	36	38	40	36	33	32	26	27	29	29	...	...	...
Neosho	Maximum	33	31	56	61	56	36	46	50	57	68	65	63	61	54	52	60	63	57	54	51	50	57	50	41	51	64	60	36	...	...	...
	Minimum	28	24	20	43	30	22	23	18	26	35	54	53	45	31	22	23	33	38	42	45	43	35	32	34	27	29	33	27	...	...	...
Rolla	Maximum	39	29	45	50	33	33	35	43	47	62	64	68	57	52	39	53	58	58	55	57	54	54	36	37	[illegible]	45	35	40	...	...	...
	Minimum	37	28	21	24	32	23	23	7	18	22	37	18	51	37	28	22	24	32	35	40	42	40	35	32	26	26	26	28	...	...	...
Springfield	Maximum	40	31	45	58	46	31	40	44	45	63	63	65	59	50	41	53	54	54	48	48	52	54	36	35	45	50	41	34	...	...	...
	Minimum	27	24	25	40	25	23	25	22	28	35	49	51	39	33	27	28	37	36	41	42	43	35	32	30	28	32	28	26	...	...	...
Southwest Plain																																
Amoret	Maximum	39	35	49	57	43	35	40	44	51	64	65	64	61	45	52	59	60	54	50	51	50	48	43	40	49	54	47	40	...	...	...
	Minimum	28	24	25	39	27	18	25	19	24	34	52	52	39	33	25	25	35	38	40	41	43	39	32	30	27	32	32	23	...	...	...
Clinton	Maximum	50	33	55	59	47	35	38	45	50	65	68	70	60	52	43	57	67	60	53	54	50	48	45	45	45	[illegible]	43	43	...	...	...
	Minimum	30	23	26	33	28	20	25	15	25	34	50	58	30	35	25	12	35	40	35	36	44	40	33	36	33	21	30	28	...	...	...
Harrisonville §§	Maximum	35	28	44	54	32	32	34	30	47	61	64	62	55	47	40	55	61	55	47	50	50	43	37	38	45	46	35	39	...	...	...
	Minimum	32	28	21	25	28	18	20	18	17	24	35	35	47	35	27	24	27	36	38	40	42	41	36	32	20	25	30	27	...	...	...
Lamar §§	Maximum	33	29	53	60	31	64	37	43	47	52	66	63	54	54	45	59	60	56	47	53	47	49	58	37	49	54	38	36	...	...	...
	Minimum	30	25	25	24	30	21	34	27	22	24	31	41	48	32	26	25	28	32	45	42	45	40	33	23	25	23	34	28	...	...	...
Lamonte	Maximum	43	52	37	55	44	32	34	41	43	64	63	65	60	48	44	53	61	55	50	53	52	49	41	38	45	42	37	42	...	...	...
	Minimum	34	22	22	33	21	19	24	17	25	34	44	47	40	35	27	23	35	37	40	40	39	38	33	30	30	28	30	28	...	...	...
Marshall	Maximum	44	32	32	57	51	30	34	41	45	65	63	68	61	47	39	52	59	56	49	52	52	47	44	37	41	38	34	41	...	...	...
	Minimum	32	22	21	31	26	17	21	13	22	31	44	52	41	32	28	22	32	34	39	41	42	42	34	30	20	29	32	29	...	...	...
Warrensburg	Maximum	40	33	38	57	40	33	34	38	49	64	63	65	60	49	42	55	62	58	49	51	50	46	41	36	45	42	36	41	...	...	...
	Minimum	31	23	21	36	27	18	25	19	24	34	50	53	41	36	27	25	38	37	40	41	43	40	32	31	20	31	31	28	...	...	...
Warsaw	Maximum	43	30	54	60	53	33	37	45	52	67	68	68	63	52	45	57	62	61	52	58	54	47	47	39	45	47	43	33	...	...	...
	Minimum	30	24	24	40	29	23	26	17	23	34	55	56	45	27	28	20	35	36	41	42	46	39	35	33	27	30	32	23	...	...	...
Northwest Plateau.																																
Avalon	Maximum	40	34	32	53	49	30	33	39	45	60	60	60	56	48	38	49	55	54	45	51	50	47	41	36	39	38	35	41	...	...	...
	Minimum	35	20	19	30	25	15	22	16	22	32	43	40	48	32	30	25	33	40	36	42	43	40	32	30	25	30	30	29	...	...	...
Grand City	Maximum	35	30	30	40	34	28	28	37	40	54	58	50	53	3	35	50	51	50	44	45	45	45	40	39	39	34	32	36	...	...	...
	Minimum	30	17	19	28	18	11	18	13	28	20	37	35	33	29	28	22	34	37	35	28	36	32	32	26	22	27	28	22	...	...	...
Kansas City	Maximum	37	29	43	52	33	32	34	40	45	62	63	62	56	43	41	55	58	50	46	49	50	44	36	37	41	37	34	38	...	...	...
	Minimum	29	23	23	33	22	16	25	20	27	37	53	42	35	33	28	30	40	41	40	41	43	32	32	31	26	29	30	28	...	...	...
Kidder §§	Maximum	35	24	38	49	28	27	32	39	42	60	60	55	54	38	37	55	55	54	46	48	48	49	34	31	37	32	33	37	...	...	...
	Minimum	32	19	22	38	27	13	20	15	20	32	50	36	46	35	28	25	34	37	37	40	43	37	35	27	21	28	29	27	...	...	...
Lexington §§	Maximum	37	27	34	55	31	31	31	38	45	62	62	63	57	47	41	53	59	53	46	50	50	42	36	36	42	35	34	41	...	...	...
	Minimum	35	22	23	32	30	18	24	17	24	32	49	49	48	33	27	25	35	38	40	42	43	41	32	30	25	29	32	30	...	...	...
Marysville §§	Maximum	33	24	37	40	24	27	28	38	41	56	58	50	52	34	35	50	52	50	50	47	46	28	34	36	42	33	32	40	...	...	...
	Minimum	31	17	17	32	22	9	8	11	11	20	30	31	31	28	26	21	24	34	36	36	39	34	31	25	21	21	27	25	...	...	...
Oregon	Maximum	33	33	35	43	34	31	31	36	48	56	59	53	58	49	37	52	55	57	46	47	52	45	40	35	39	37	40	35	...	...	...
	Minimum	27	18	20	31	19	11	16	11	23	31	44	32	33	29	26	24	29	37	36	39	41	32	31	27	22	26	28	24	...	...	...
St. Joseph	Maximum	34	26	38	45	30	30	32	39	44	60	62	57	54	36	38	55	57	51	45	48	49	41	35	31	43	33	34	37	...	...	...
	Minimum	25	20	22	30	19	13	18	17	25	35	36	35	31	30	28	27	41	40	39	41	41	32	32	28	24	28	29	27	...	...	...
Trenton	Maximum	40	34	34	48	40	26	30	34	40	54	58	56	54	43	36	44	52	51	49	48	48	47	40	36	35	36	35	38	...	...	...
	Minimum	33	20	21	29	23	13	20	15	23	31	39	35	40	31	30	24	31	36	37	40	42	38	32	28	22	27	30	31	...	...	...

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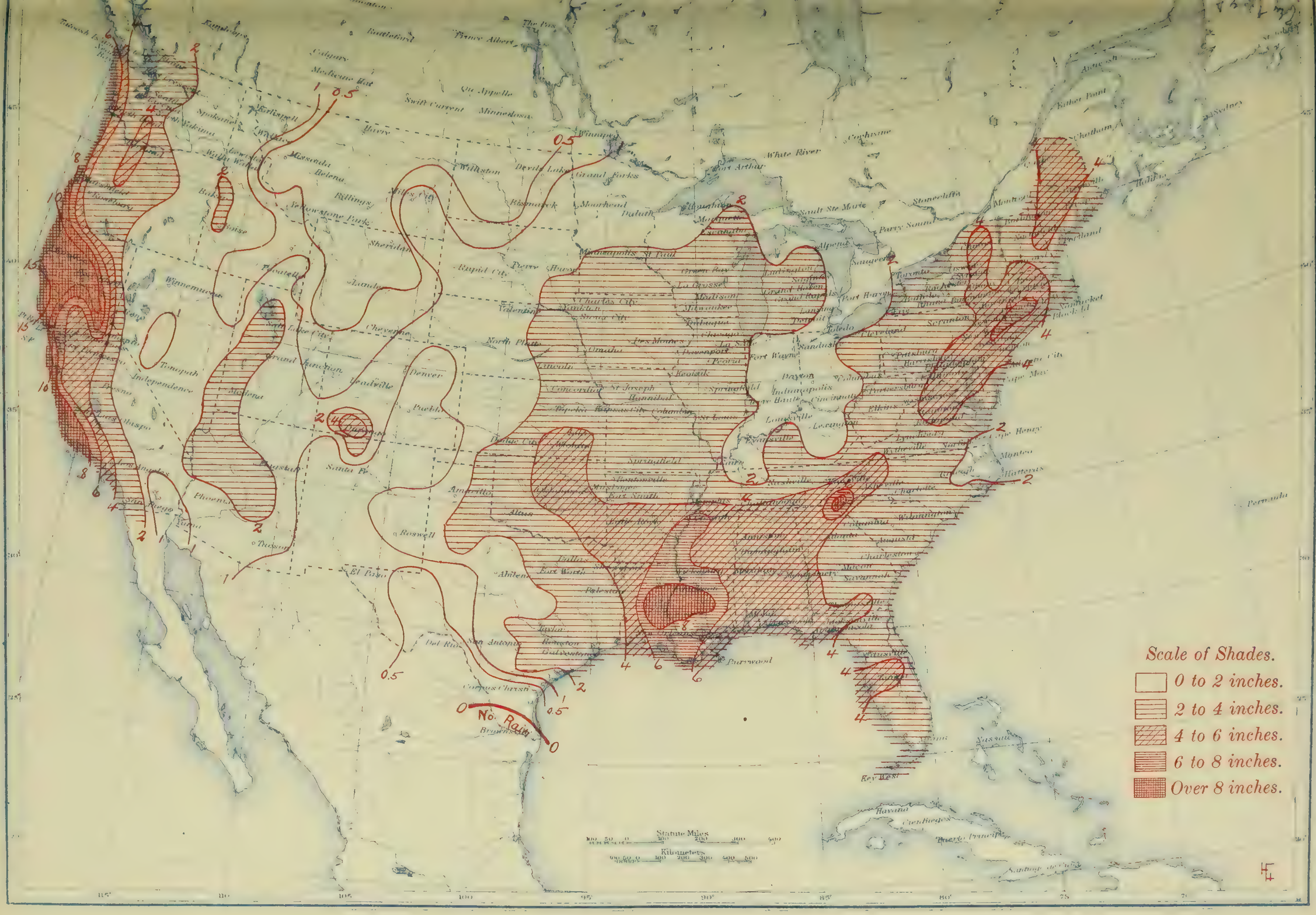
*, **, ***, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charg
the preceding day, on which it almost always occurs.


Scale of Shades.
☐ 0 to 2 inches.
▤ 2 to 4 inches.
▨ 4 to 6 inches.
▤ 6 to 8 inches.
▦ Over 8 inches.
No Rain
Statute Miles
Kilometers
115°
110°
105°
100°
95°
90°
85°
80°
75°
70°
45°
40°
35°
30°
25°

M S

[illegible] 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

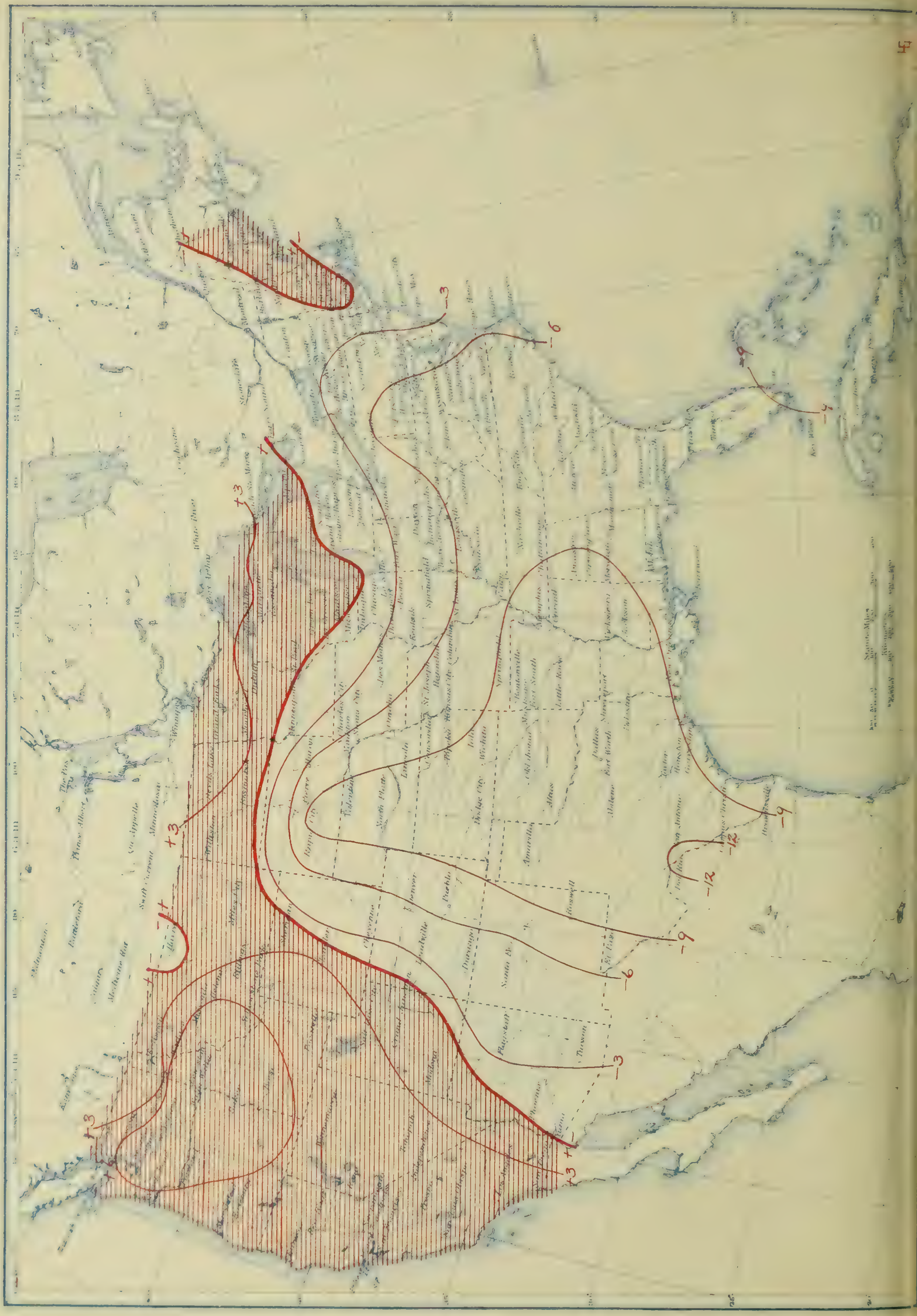
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MARCH, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
APRIL 23, 1915.

Departure of the Mean Temperature from the Normal, March, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

L. XIX. COLUMBIA, MO., MARCH, 1915. No. 3

GENERAL SUMMARY.

Iarch, 1915, was characterized by excessive cloudiness, com- ratively light winds, and uniformly low temperatures, with- any very cold weather. While precipitation was fully 50 cent below normal, it was not only sufficient for present ds, but made the ground too wet for extensive plowing. ubtless, most of the moisture penetrated the ground, as the vailing weather was unfavorable for excessive evaporation. ıeat is in fair to good condition. Cattle are reported as ing stood the winter well. The prevailing cold weather vented a too early start of fruit, consequently the outlook so is favorable. At the close of the month warmth and shine were needed.

'he average March temperature since 1888, as compared h the present year, has been lower but once, and equaled once. The average temperature, 36.4°, is 3° lower than t of the preceding month of February, although of course t month was unusually mild. The maximum temperature, , is the lowest on record for March. While there were no erely cold days, there were few that could be classed as rm or even pleasant.

Iarch in other years since 1867, as compared with the pres- , has been drier but four times, namely, 1879, 1885, 1900, 1910.

'he total monthly fall was well distributed both as to time locality, the somewhat heavier amounts falling in the thwest plain.

PRESSURE.

Iigh pressure dominated during the month, consequently ther variations were less frequent and marked than is usual Iarch. The monthly sea-level pressure, 8 stations report- , was 30.12 inches, or .09 inch above normal.

TEMPERATURE.

'he monthly mean for the State, 67 stations reporting, was 4°. The mean departure from the normal for 54 stations ing 10 or more years' record was minus 8.1°. The mean the northeast plain was 35.6°, or 6.7 below normal; south- lowands, 41.2°, or 7.7 below normal; Ozark plateau 6°, or 9.8 below normal; sowthwest plain, 35.1°, or 9.2° w normal, and northwest plateau, 33.4°, or 7.0° below mal. The highest local monthly mean was 43.4° at Ca- iersville, and the lowest was 31.2° at Maryville. The high- temperature recorded was 70°, at Jefferson City on the 24th, the lowest was 6°, at Clinton on the 6th. Minimum peratures were 32° or lower on an average of 28 days in the theast plain, 18 in the southeast lowlands, 27 in the Ozark teau, 28 in the southwest plain, and 29 in the northwest eau.

HUMIDITY.

'he mean relative humidity for the State was 78 per cent, or ut 8 per cent above normal.

PRECIPITATION.

'he average precipitation for the State, 78 stations reporting, 1.50 inches. The departure from the normal for 67 sta- ıs having 10 or more years' record was minus 1.74 inches. 'he monthly averages and departures for the five divisions e as follows: northeast plain, 1.10 inches, deficiency 1.70 ıes; southeast lowlands, 1.34 inches, deficiency 3.27 inches; rk plateau, 1.85 inches, deficiency 1.87 inches, southwest in, 1.90 inches, deficiency .82 inch, and northwest plateau, 1.29 inches, deficiency 1.03 inches. The greatest local monthly precipitatian was 3.67 inches, at Lockwood, and the least was 0.35 inch at Crocker.

The snowfall of the month was somewhat above the average, this being especially true of all divisions except the eastern part of the Ozarks and the southeastern lowlands. In the Osage watershed, and thence northward to the Grand River the total monthly fall exceeded 10 inches, and was as much as 18 inches in a few western counties.

The average number of days with 0.01 inch or more precipitation was 6.

WIND.

The prevailing winds were from the northwest. The total wind movement was below normal at all regular Weather Bureau stations. There were no very strong winds at any time during the month.

SUNSHINE AND CLOUDINESS.

The month was unusully cloudy. The sunshine for the State averaged about 26 per cent below normal. The average number of clear days was 7, partly cloudy, 8, and cloudy 16.

MISCELLANEOUS PHENOMENA.

Fogs—1st, 5th, 13th, and 29th.
Halos, lunar—1st, 23rd, 26th and 29th.
Halos, solar—3rd, 24th, 26th and 30th.

ERRATA FOR FEBRUARY, 1915.

Bolivar—Total precipitation should be 2.89 inches; and the total at Eldon should be 2.58 inches. The number of rainy days at Houston should be 9.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	30.12	86	......	122	33	6,263	8.4	32	ne	4
Hannibal	30.12	81	......	....	....	6,341	8.5	35	ne	4
Kansas City	30.14	79	72	121	33	8,824	11.9	32	sw	24
St. Joseph	30.15	83	72	113	31	6,668	9.0	26	nw	4
St. Louis	30.10	76	64	171	46	8,184	11.0	35	sw	24
Springfield	30.12	87	77	132	36	7,414	10.0	26	e	3
Cairo, Ill	30.08	77	64	....	....	7,035	9.5	30	ne	4
Keokuk, Iowa	30.13	84	74	170	46	3,638	4.9	28	ne	4

COMPARATIVE DATA FOR MARCH.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	38.5	−4.8	90	1	4.02	+1.11	......	....	10	....	....	....
1889	44.3	+1.0	84	13	1.98	−0.93	......	....	5	....	....	....
1890	37.3	−6.0	76	−11	2.61	−0.30	......	5.7	8	....	....	....
1891	36.6	−6.7	78	−11	3.01	+0.10	......	7.1	10	....	....	....
1892	38.9	−4.4	87	5	3.11	+0.20	......	....	8	8	10	13
1893	40.5	−2.8	86	1	2.86	−0.05	2.15	3.2	7	11	10	10
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	4.4	9	14	7	10
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	− 5	6.07	+3.16	4.10	1.0	12	9	9	13
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.4	−4.1	78	− 8	2.93	+0.02	4.30	8.9	6	9	11	11
1900	40.4	−1.9	88	− 4	1.48	− 1.43	3.41	0.2	6	15	9	7
1901	42.7	−0.6	85	− 1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.50	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	−8.7	75	− 5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	1.4	6	16	8	7
1912	35.2	−8.1	89	− 4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	−1.3	87	− 2	2.75	−0.41	3.01	4.7	8	13	7	11
1915	36.4	−8.1	70	6	1.50	−1.74	1.85	7.9	6	7	8	16

Climatological data for March, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	1.06	−2.08	0.50	8.1	9	9	3	19	nw	C. Randecker.
Brunswick	Chariton	652	36	31.8	− 6.9	60	24	20	9†	29	1.77	−0.66	1.57	15.0	4	10	1	20	nw	Louis Benecke.
Columbia	Boone	781	26	35.2	− 6.2	63	24	22	9	28	1.15	−1.88	0.77	8.4	8	2	4	25	nw	U. S. Weather Bureau.
Fayette	Howard	725	31	32.9	− 9.6	59	24	18	9	31	2.10	−0.58	1.50	15.4	10	10	4	17	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	36.0	− 9.0	63	24	21	1†	35	1.07	−1.83	0.50	11.7	11	5	15	11	w	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	1.01	−1.55	0.50	8.0	5	4	10	17	nw	J. W. Pulliam.
Hannibal	Marion	534	23	35.2	− 6.4	60	24	22	29	27	0.75	−2.01	0.44	5.5	16	7	10	14	nw	U. S. Weather Bureau.
Hermann	Gasconade	483	42	....	.....	....	....	....	....	....	0.48	−1.64	0.37	4.0	8	8	5	18	nw	C. T. Mausshund
Jefferson City	Cole	628	30	39.0	− 4.5	70	24	23	9†	39	0.86	−2.25	0.50	7.7	7	11	2	18	n	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	1.21	......	1.00	11.7	6	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	36.4	− 6.2	62	24	20	29	36	0.90	−1.69	0.44	6.0	12	11	9	11	nw	J. T. Farrell.
Macon	Macon	881	18	33.4	− 7.9	60	24	17	21	30	1.34	−1.33	0.87	14.0	6	3	14	14	nw	John A. Cook.
Mexico	Audrain	797	38	34.9	− 7.4	63	24	21	9†	36	1.00	−1.65	0.60	8.1	11	9	3	19	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	37.3	− 8.4	61	24	24	9†	29	0.42	−3.28	0.26	2.5	4	1	19	11	nw	E. E. Steines.
Palmyra	Marion	652	4	34.0	.....	60	24	22	9†	27	1.18	−1.74	0.50	5.9	5	6	9	16	nw	W. B. Markell.
St. Catharine	Linn	914	3	33.4	.....	57	24	14	21	26	1.62	......	1.30	11.5	7	3	18	10	ne	L. D. Baker.
St. Charles	St. Charles	614	38	38.0	− 6.0	64	14	23	29	30	1.10	−1.15	0.41	3.0	4	6	10	15	nw	L. C. Saeger.
St. Louis(1)	St. Louis City	717	45	38.5	− 5.0	61	24	28	29	27	0.44	−2.99	0.24	2.0	10	6	12	13	nw	U. S. Weather Bureau.
St. Louis(2)	......do	578	4	37.5	.....	58	24	27	29	24	0.49	......	0.22	2.9	8	9	12	10	w	St. Louis University.
Steffenville	Lewis	576	23	35.4	− 6.3	60	24	20	9†	28	1.47	−1.15	0.60	8.0	5	7	13	11	ne	Frank Hall.
Sublett ‡‡	Adair	1,000	35	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	....	Lewis Spriggs
Unionville	Putnam	1,072	23	31.6	− 6.2	56	24	13	21	26	2.12	−0.16	1.04	19.0	8	8	4	19	nw	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	0.56	......	0.25	2.5	4	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	35.2	− 6.4	61	24	23	21†	31	0.64	−2.76	0.39	4.0	8	6	7	18	nw	Prof. J. H. Frick.
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	1.05	−2.47	0.80	T.	4	14	3	14	n	D. L. Albert
Cardwell	Dunklin	225	5	42.3	.....	67	25	24	22	34	2.34	......	1.02	0.5	5	17	2	12	nw	E. M. Perry.
Caruthersville	Pemiscott	220	25	43.4	− 7.7	67	25	24	22	31	1.93	−2.01	0.91	T.	4	17	3	11	nw	H. E. Averill.
Doniphan	Ripley	440	11	40.6	− 9.4	67	25	22	21	37	1.57	−2.35	0.80	1.4	5	11	3	17	nw	W. W. Martin.
Jackson	Cape Girardeau	458	25	41.9	− 5.5	67	28	24	22	38	0.77	−4.05	0.70	1.0	5	4	15	12	n	L. M. Bean.
Marble Hill	Bollinger	420	24	39.6	− 7.9	64	25	23	1†	37	0.52	−4.25	0.52	T.	1	11	14	6	n	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	2.20	−3.52	1.30	0	9	14	1	16	n	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	0.71	......	0.41	0	2	16	0	15	n	Christian Seabaugh
Poplar Bluff	Butler	333	12	40.1	− 9.1	67	24	22	19	34	1.57	−3.80	0.93	1.0	5	15	2	14	......	M. S. Wiseheart.
Sikeston	Scott	328	15	41.5	− 7.6	69	14	24	22	33	1.31	−4.11	0.62	0	4	10	13	8	nw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	40.4	− 6.6	64	25	24	22	26	0.75	−3.27	0.64	0.1	6	5	12	14	n	U. S. Weather Bureau.
Ozark Plateau.																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	0.46	−1.48	0.15	2.0	5	9	2	20	nw	G. V. Randolph.
Bagnell	Miller	544	....	....	.....	....	....	....	....	....	1.01	−2.05	0.58	....	3	10	4	17	w	Mrs. Nellie V. Houser
Belle	Maries	1,000	24	37.8^{k}	− 7.5	65	24	20	21	....	.....	......	....	....	....	1^{k}	13^{k}	6^{k}	......	A. J. Wofford.
Birchtree	Shannon	1,200	22	38.2	− 9.6	64	25	19	22	34	1.66	−3.24	1.03	4.0	3	14	6	11	nw	V. H. Kirkendall.
Bolivar	Polk	1,020	28	36.2	−10.3	63	24	16	6	31	0.78	−2.23	0.65	7.5	2	8	11	12	nw	A. C. Fink.
Cassville	Barry	1,500	5	36.7	.....	62	24	13	31	37	2.47	......	1.13	3.0	8	10	7	14	n	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	36.8	.....	59	25	21	6†	31	0.35	......	0.26	2.5	3	9	13	9	e	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	36.2^{f}	−13.1	63	14	16	6	37	2.65	−0.92	1.02	1.5	6	9	5	17	nw	H. E. Dean.
Duncan	Webster	1,400	3	33.1	.....	54	14	15	1	28	2.38	......	0.73	12.6	11	7	9	15	n	C. A. Mingus.
Eldon	Miller	934	15	36.5	.....	62	24	21	21	26	0.86	−2.81	0.40	8.4	6	4	24	3	nw	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	40.8	.....	62	25	24	22	27	0.85	......	0.70	T.	2	15	8	8	w	R. C. Walton.
Gano ‡‡	Dent	1,250	12	36.0	−11.6	61	24	20	21	30	0.98	−3.07	0.71	2.8	6	9	6	16	nw	A. C. Leach.
Goodland	Iron	1,000	11	37.2	− 8.9	63	14	17	1†	40	0.72	−3.40	0.70	......	2	16	1	14	n	F. M. Adams.
Hollister	Taney	1,000	7	38.8	.....	68	14	20	1†	44	3.66	−0.46	1.40	8.5	5	11	0	20	ne	W. P. Chapmann
Houston	Texas	1,280	23	36.6	−10.2	61	14	18	21	34	1.82	−2.84	0.63	3.4	6	10	6	15	nw	R. F. Harmon.
Ironton	Iron	925	38	37.6	− 7.5	63	14	19	1	38	0.98	−3.42	0.75	1.0	11	7	7	17	n	W. H. Delano.
Koshkonong	Oregon	911	15	40.0	−10.0	66	25	20	22	30	2.14	−1.96	1.10	7.0	4	9	3	19	nw	R. M. Hitt.
Lebanon	Laclede	1,265	27	36.9	− 9.2	64	24	20	6†	34	0.55	−3.31	0.28	T.	6	9	12	10	nw	O. L. Weissgerber.
Lockwood	Dade	1,088	21	35.2	.....	58	24	17	6	25	3.67	+1.38	1.11	11.0	11	8	2	21	nw	C. S. Crow.
Mountain Grove	Wright	1,490	17	35.0	−11.9	61	14	16	22	32	2.58	−1.66	0.85	9.5	6	5	8	1-	nw	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	35.4	−11.0	60	24	16	1	30	3.46	−0.23	0.95	7.7	10	6	7	18	nw	J. R. White & Son.
Neosho	Newton	1,083	33	37.2	−11.2	61	14	14	1	32	3.50	+0.06	1.25	2.7	11	....	....	....	sw	W. O. Buck.
Rolla	Phelps	1,139	34	35.7	− 9.2	62	24	21	1†	31	1.14	−2.38	0.41	7.6	8	6	12	13	w	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	35.1	− 8.4	59	24	19	21	26	2.23	−1.84	0.86	11.2	12	6	11	14	nw	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	1.70	−1.72	1.20	5.0	5	7	11	13	w	Mrs. S. A. Jackson.
Southwest Plain.																				
Amoret	Bates	850	7	35.6	.....	57	15	14	6	28	1.69	......	1.60	16.0	2	2	4	25	ne	Darby Fruit Farm.
Clinton	Henry	800	29	35.4	.....	61	24	6	6	28	2.20	−0.37	0.85	10.0	4	2	15	14	nw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	33.4	− 7.1	56	24	17	6†	28	1.65	−0.89	0.75	18.0	5	5	3	23	nw	A. J. Sharp.
Lamar	Barton	964	35	35.3	−11.4	59	24	17	6†	27	2.22	−0.62	1.16	8.0	6	0	10	21	nw	E. H. Adams.
Lamonte	Pettis	863	27	35.0	.....	59	24	20	6†	31	1.25	−1.21	0.50	13.6	4	3	17	11	nw	J. Ed. Hall.
Marshall	Saline	779	25	34.9	− 7.5	60	24	19	10	29	1.70	−0.88	0.80	14.5	7	9	7	15	nw	Prof. W. H. Black.
Nevada	Vernon	860	22	34.8	.....	56	24	16	6†	26	1.45	−1.62	0.70	18.8	5	9	16	6	nw	C. Jewell.
Warrensburg	Johnson	883	37	35.6	− 7.7	58	24	20	6	26	2.42	+0.03	1.85	14.9	10	2	9	20	nw	Geo. H. Collins.
Warsaw	Benton	883	11	36.0	−11.4	64	24	20	6	36	2.03	−1.01	0.95	13.5	8	4	14	13	n	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	2.34	......	1.58	15.2	7	5	3	23	nw	John W. Cauthorn.
Northwest Plateau.																				
Avalon	Livingston	730	30	35.2	− 6.7	60	24	18	21	27	1.40	−1.28	1.25	15.0	3	4	19	8	nw	F. G. Ashbaugh.
Bethany	Harrison	881	26	32.6	− 6.5	55	24	13	12	28	1.23	−1.08	0.60	10.5	3	4	9	18	nw	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	1.28	......	1.10	10.3	6	8	0	23	....	Hocey O. Dupy
Conception	Nodaway	982	31	31.6	− 7.4	53	24	18	21	21	0.73	−0.99	0.50	6.5	3	2	12	17	ne	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	32.4	− 8.1	56	24	14	12	25	0.82	−1.26	0.37	4.5	3	8	2	21	nw	W. H. Campbell.
Kansas City	Jackson	963	27	34.7	− 6.1	54	24	21	21	19	1.24	−1.53	0.85	13.5	10	2	10	19	nw	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	32.8	− 8.0	55	24	19	12	20	1.20	−1.13	1.00	10.5	3	9	4	18	nw	J. F. Sharp.
Lexington	Lafayette	813	34	34.9	− 8.2	59	24	19	12†	25	1.34	−0.80	0.80	9.9	7	6	0	25	n	J. W. Keithley.
Liberty	Clay	864	27	35.6	− 6.9	57	24	20	21	30	1.37	−0.99	1.30	14.0	3	4	14	13	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	31.2	− 5.9	57	24	17	21	32	1.80	−0.14	0.60	14.5	6	9	4	18	n	J. R. Brink.
Oregon	Holt	1,113	60	32.8	− 6.0	56	24	17	1†	25	0.76	−1.33	0.68	9.5	2	1	15	15	nw	Tom Curry.
St. Joseph	Buchanan	967	41	33.0	.....	55	24	19	21	21	1.36	−0.65	0.82	9.8	6	4	6	21	nw	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	31.8	.....	55	24	15	1†	23	1.20	......	0.50	9.0	4	7	7	17	nw	John F. Frazier.
Trenton	Grundy	812	21	33.4	− 7.1	56	24	19	12†	26	1.19	−1.08	0.49	9.0	8	9	3	19	nw	W. H. Estes.
State means and extremes			....	36.1	− 8.1	70	24	6	6	44	1.50	−1.74	1.85	7.9	6	7	8	16	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1; of Sublett, Kirksville, R. F. D. Sublett.

Daily precipitation for March, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
ville ‖	Missouri				.50	.23	.08	.03							T.		T.		T.	.04		.06	.07	.02		.03							1.06
swick ‖	Grand			T.		1.57		T.							T.							.06	.09			.05							1.77
mbia***	Missouri			.15	.77	.07	.09							T.		.02	T.		.01	T.	.03	T.	.01	T.	T.								1.15
tte	do			.10	1.50	.02	.02	.05								T.			T.	.01	.10	.25	.04			.01							2.10
on	do				.50	.30	.02	.06									.02		.01	.08	.03	.03	.01	.01									1.07
a	Mississippi				.50	.04	.06									T.			T.	T.	.21					.20	T.						1.01
nibal***	do				.30	.18	.03	.01								.01	.01		.09	T.	.05	T.	T.	T.	.01	.06	T.						0.75
mann	Missouri				T.	.37	T.	.04							T.	T.	.01	T.		.01	.01	.02	.01	.01									0.48
rson City ‖	do				.12	.50		.10											.05	T.	.04	.03	.02	T.									0.86
tesville	Chariton				**	1.00	.10							T.					T.	T.	.02		.05		.04								1.21
siana	Mississippi				.04	.44	.02	.09								.03	.04		.05	.03	.06	.02	.02			.06	T.						0.90
on	Chariton				.07	.87	.09	.05								T.			T.	T.	T.	.15	T.			.11							1.34
ico ‖	Mississippi				.10	.60	.07	.07						T.	.02		.02			.03	.04	.03	.01	T.		.01							1.00
field	Meramec				.26		T.	.07							T.	T.	.02		.07	T.	T.	T.	T.										0.42
nvra ‖	Mississippi				T.	.40	T.	.10									T.	T.	T.	.09	T.	.50	T.			.09							1.18
atherine	Grand				1.30	T.	.05	.02								T.	T.			T.	.01	.10	.04			.10	T.						1.62
arles	Missouri					.41		.30								T.	T.		.21	T.	T.	.18					T.						1.10
ouis (1)***	Mississippi				.15	.09	.03	.02							.01	T.	.02		.08	T.	.01	.02	T.		T.	.01	T.						0.44
ouis (2)	do				.22	.02	T	.07							T.	T.	.03		.07	T.	.01	.06				.01							0.49
enville	do				.60	.60	T.	.07								T.			T.	T.	.10	T.	T.			.10							1.47
ter	do																																
nville ‖	Grand				.08	.96	.04	.37	T.							T.				.04	T.	.16	.12	T.		.35	T.						2.12
dalia	Mississippi				**	.25											T.	.15	.16		T.	T.											0.56
renton	do				T.	.39		.08							.01		.03			.04	T.	.03	.05	.01									0.64
theast Lowlands.																																	
Girardeau	Mississippi					.80	.15	.05															.05										1.05
dwell	do				1.02											.30	T.				T.	.12		T.	T.		.20				.70		2.34
athersville	do				.91	T.			T.							.48	T.		T.		T.	.04		T.			T.				.50		1.93
pman	Black				.80											.08			.02		T.	.14					T.				.53		1.57
son	Mississippi				.70			.02							.01		.02									.02					T		0.77
le Hill	do				.52												T.					T.											0.52
Madrid ‖	do	.10				1.30		.01										.01		.06		.02	.10								.20	.40	2.20
on (near)	do				.41	.30																											0.71
lar Bluff	Black			.05	.93														T.			.03		.03					.53				1.57
ston	Mississippi				.62	.28																.03									.38		1.31
o, Ill.***	do				.62	.02		.01							T.	T.	.01		.01		T.	T.	T.			T.	T.				.08		0.75
ark Plateau.																																	
ngton ‖	Gasconade				.06	.15								T.					.06	.11	T.	T.									.08	T.	0.46
nell	Osage				.38	.58																T.	.05								T.		1.01
e	Meramec																																
tree	Black				1.03	.08																T.									.55		1.66
var	Osage			.65																.13													0.78
ville	White	1.13	.12	T.	.01						T.									.07	.04	.06	T.							.20	.84		2.47
ker	Gasconade				.26			.07								T.			T.	T.	T.	T.	T.								.02		0.35
n	Neosho			.85	.31								T.	1.02		T.			.09	T.	T.	.15	T.							T.	.23		2.65
ean	Osage			.03	.73	.53	T.	T.	T.				T.		T.	.01	.01		T.	.02	.03	.10	.17	.05							.70		2.38
n	do			T.	.31	.40	T.									T.	.06		.03	.03	T.	.03	T.								T.		0.86
t City	Black				.70	.15										T.																	0.85
o	Meramec				.54	.17		T.								T.	.04		T.	.08	.08	T.		T.			T.				.07		0.98
lland	Black					.70		.02																									0.72
ister	White			.20	.56	1.40																.30									1.20		3.66
sten	Gasconade			T.	.63	.25			T.						T.	T.	.02		T.	T.	T.	.10	T.	T.							.22	.60	1.82
ton	Mississippi				.20	.55	T.	T.	T.						T.	T.	.03	.03	T.	.03	.05	T.	.02	.01			.03				.02	.01	0.98
konong	Black				1.10	.06											T.			T.		.40									.58		2.14
mon	Osage	.02			.28			.01									.04				T.	.07	T.	T.	T.	T.	T.				.13		0.55
wood	do			.73	1.11	.10								.15	.22	T.			.12	.16	.15	.22	.06								.65		3.67
ntain Grove ‖	White				.52	.85											T			T.	T.	.19	.08								.68	.26	2.58
nt Vernon	Neosho			.95	.79	T.							.10			.30			T.	.08	.10	.19	.05							.15	.75		3.46
sho	do			.73	1.25	.15	.04						.10			.15			.07	.04	T.	.03	T.							.04	.90		3.50
a	Meramec	T.			.16	.41	T.	.02						T.			T.	.04	T.	.09	.26	T.	T.	.03			T.				.13		1.14
ngfield***	White			.65	.54	T.	T.	T.	T.				.01		T.	.06	.01		.02	.03	.14	.07	.01	T.						.24	.45		2.23
atland	Osage			1.20	.10	.10					T.	T.	T.	.10																	.20		1.70
thwest Plain.																																	
ret	Osage			T.	1.60	T.	T.						T.		T.	T.	T.	T.	.09	T.					T.						T.		1.69
ton	do			.35	.80	.20																									.85		2.20
risonville ‖	do				.60	.75	T.									T.			.03			T.	T.	T.		.02					.25	T.	1.65
ar ‖	Neosho	T.		1.16		.62	T.	T.						T.		.08			.02	T.	T.	.07	T.				T.				.27		2.22
onte	Missouri			.15	.50	.50	.10	T.					T.			T.			T.	T.	T.	T.	T.								T.		1.25
all	do			.12	.40	.80	T.	T.								T.		T.	.10	.05	.18	T.	.05		T.								1.70
ria	Osage			.70	.42							T.	T.	T.	T.	.20			.05	T.	T.	T.	T.								.08		1.45
rensburg	Missouri			.20	1.85	.21	T.									T	T.		.02	.01	.03	.01	.02			.02					.05		2.42
saw	Osage			.35	.95	.23	T.		T.				T.	T.	.04	T		T.		.09	.17	T.	.03		T.						.17		2.03
erly	Missouri				.64	1.58	.03	.03	T.										.01	T.	T.	T.	.02	.03									2.34
thwest Plateau.																																	
don	Grand				**	1.25	T																	.15									1.40
any	do			T.	.60	.45	T.	T.								T.	T.	T.	T.	T.	T.	T.	T.			.18	T.						1.23
licothe	do				.02	1.10	.02	.06														.03				.05							1.28
eption	Missouri			.10	.50			T.								T.			T.		T.	T.			T.	.13							0.73
t City	Grand		T.	T.	.35	T.	T.	T.	T.									T.	T.	T.	.10	T.	T.		.37	T.	T.						0.82
sas City***	Missouri			.09	.85	.13	.02											.01			.01	.01				.03				.06	.03		1.24
der ‖	Grand				.15	1.00																	T.			.05							1.20
ngton ‖	Missouri				.40	.80		.06						.01								.02	.02			.03							1.34
tty	do			.07	**	1.30	T.									T.					T.	T.	T.								T.		1.37
sville ‖	do				.60	.60	.10	T.	T.							T.				T.	T.	.10				.35	.05						1.80
on	do			.08		.68														T.	T.												0.76
seph***	Missouri			.26	.82	.23	T.	T.	T.		T.					T.		T.		T.	.01	T.	T.		.02	.02				T.			1.36
io	do			.40	.50																	.05			T.	.25							1.20
ton	Grand			.17	.49	.11	.06									T.			T.	T.	.08	.05	T.		.21	.02							1.19

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 period, midnight to midnight.

**Precipitation in the next following measurement.

‡ Separate dates of fall not recorded.

Daily temperatures for March, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Northeast Plain.																																	
Brunswick §§	Maximum	44	42	41	32	33	31	35	40	40	40	33	37	46	51	40	48	45	45	43	34	40	43	47	60	48	42	50	55	47	49	43	42
	Minimum	24	25	31	28	26	22	22	29	20	20	21	22	27	32	32	32	28	31	31	25	21	27	29	31	35	27	28	30	23	27	25	2
Columbia	Maximum	44	42	42	31	33	29	31	39	41	39	37	41	45	49	39	46	44	42	42	33	37	37	47	63	50	30	48	53	46	44	40	3
	Minimum	24	28	31	27	27	23	28	28	22	21	29	25	34	38	31	32	26	31	30	25	22	28	33	35	32	29	32	30	24	30	25	2
Fayette	Maximum	43	40	40	29	30	26	32	35	36	39	31	37	43	44	36	44	43	43	38	31	37	36	45	59	47	38	46	51	54	42	38	4
	Minimum	23	28	30	24	21	20	25	24	18	20	23	22	31	35	30	30	27	30	27	23	19	26	29	30	30	26	29	28	23	27	24	2
Hannibal	Maximum	45	40	40	34	35	33	34	38	44	35	38	48	48	49	41	46	45	40	41	35	39	38	47	60	50	38	46	50	45	41	35	41
	Minimum	24	28	31	28	30	25	29	29	21	26	25	21	33	31	31	33	28	33	30	27	24	30	34	33	30	28	29	30	22	28	26	2
Jefferson City §§	Maximum	54	52	50	34	41	35	38	45	47	43	46	50	58	65	43	56	57	48	50	45	42	37	55	70	58	52	55	62	51	52	50	4
	Minimum	25	26	31	28	27	24	24	29	23	25	28	24	28	36	32	32	27	35	30	24	23	26	29	31	36	29	29	30	25	33	25	2
Macon	Maximum	43	39	40	31	36	31	36	40	40	39	35	39	43	48	40	47	45	44	41	33	38	37	44	60	48	39	47	53	46	43	41	41
	Minimum	22	23	30	27	25	23	23	26	19	20	22	21	24	32	32	31	26	28	30	25	17	20	28	30	35	26	26	30	20	22	23	2
Mexico §§	Maximum	48	42	43	32	35	29	37	40	41	39	42	47	47	53	40	48	47	44	41	35	39	37	50	63	45	40	50	54	57	42	38	3
	Minimum	23	23	30	28	26	25	24	29	21	22	24	22	25	33	32	32	23	23	29	27	24	24	28	31	33	27	27	30	21	24	23	2
Oakfield	Maximum	49	49	44	39	36	31	38	44	46	45	42	50	51	60	42	47	48	42	43	36	41	37	46	61	53	44	48	57	49	43	47	4
	Minimum	25	29	29	29	30	26	27	28	24	26	28	25	35	37	32	32	27	33	29	28	25	26	30	32	42	29	29	35	23	30	24	2
St. Catharine	Maximum	43	39	38	35	36	33	35	37	37	38	33	35	42	47	43	44	46	45	42	34	37	38	45	57	51	37	45	51	43	40	41	4
	Minimum	21	29	29	24	25	23	24	30	18	18	26	18	26	32	32	31	26	31	30	24	14	27	27	31	33	25	28	29	21	26	23	25
St. Louis (1)	Maximum	48	49	44	36	39	32	35	42	47	45	43	51	53	57	41	45	48	44	44	36	37	38	47	61	51	42	47	54	48	43	46	44
	Minimum	30	34	33	31	30	28	28	31	30	30	30	30	42	41	36	33	32	34	32	31	29	29	34	34	38	31	33	35	28	30	29	32
Unionville §§	Maximum	46	37	36	30	36	34	32	42	38	32	36	40	45	48	36	46	42	39	40	32	33	38	46	56	38	35	44	45	44	42	40	3
	Minimum	20	24	26	24	20	24	22	20	15	18	17	18	21	28	30	31	25	28	32	24	13	20	25	31	34	21	22	28	18	22	24	2
Warrenton §§	Maximum	49	44	43	32	35	30	34	40	47	37	36	38	47	56	48	47	46	40	44	35	35	37	47	61	48	41	51	53	47	47	39	4
	Minimum	25	27	29	29	27	25	26	27	24	25	27	28	28	35	33	32	28	27	30	27	23	24	27	30	31	28	29	31	23	25	24	27
Southeast Lowlands.																																	
Cardwell	Maximum	48	51	57	54	50	46	46	48	50	55	48	54	60	62	58	45	54	55	53	43	38	36	41	60	67	58	54	64	60	50	50	52
	Minimum	29	27	28	37	36	39	28	34	36	28	32	29	32	32	38	33	36	40	33	33	25	24	27	30	45	37	32	30	37	32	29	2
Caruthersville	Maximum	53	55	58	50	46	45	42	50	56	59	49	57	58	65	59	45	55	55	52	45	42	42	45	59	67	57	57	63	60	48	56	5
	Minimum	29	28	31	38	38	30	32	34	31	38	31	31	40	34	39	34	33	36	34	34	25	24	31	32	42	40	34	33	36	32	30	3
Doniphan	Maximum	47	52	52	48	42	41	39	49	50	53	50	50	55	64	62	45	52	55	45	42	35	40	45	57	67	60	52	64	62	48	50	5
	Minimum	23	24	28	34	35	29	31	34	26	34	30	26	37	28	37	33	33	35	29	30	22	23	33	26	43	35	32	27	30	32	25	
Jackson	Maximum	52	55	57	45	40	48	42	47	54	53	52	54	58	60	60	52	52	53	53	49	42	43	45	59	52	56	52	67	55	40	55	52
	Minimum	25	27	31	33	31	36	30	33	39	30	27	27	37	36	35	33	29	45	31	32	27	24	32	32	41	35	30	29	28	32	26	31
Marble Hill	Maximum	50	55	50	46	44	42	37	45	50	53	53	57	55	63	57	45	52	55	46	40	40	40	44	57	61	48	50	62	60	45	55	50
	Minimum	23	25	30	33	35	32	30	28	25	29	25	27	23	35	30	25	31	35	31	31	21	25	31	31	38	34	27	25	25	31	25	29.
Poplar Bluff	Maximum	52	55	52	43	43	44	39	51	50	56	49	50	58	65	44	50	55	56	40	43	41	45	59	67	40	58	61	45	45	52	50	5
	Minimum	25	26	34	35	30	32	34	29	33	26	27	33	33	38	32	30	37	29	22	23	26	29	33	38	29	28	30	33	27	26	23	30.
Ozark Plateau.																																	
Birchtree	Maximum	47	54	50	45	38	37	35	42	50	50	49	....	53	63	53	43	50	50	43	35	31	39	45	57	64	52	52	60	51	46	47	47.
	Minimum	20	26	29	31	30	29	26	29	26	27	26	....	37	29	32	28	27	35	30	27	21	19	30	38	43	32	29	29	26	31	21	2
Cassville	Maximum	50	55	47	40	31	33	35	44	43	41	55	55	45	51	54	54	42	50	54	37	32	34	50	62	58	51	57	61	50	58	48	47.
	Minimum	16	22	34	31	25	21	21	25	25	27	27	26	29	24	30	30	30	26	31	22	24	22	30	25	41	30	27	25	35	19	13	26.
Duncan	Maximum	35	51	45	42	33	27	28	33	37	38	41	42	47	54	51	37	40	40	32	32	28	31	41	53	....	48	51	47	47	46	37	
	Minimum	15	23	28	30	26	21	25	26	22	28	24	22	31	33	29	29	24	28	27	21	25	16	27	36	....	28	26	27	25	30	19	25.
Eldon	Maximum	47	47	44	50	36	36	34	37	43	41	39	45	51	58	45	47	47	47	41	37	36	38	51	62	55	43	51	55	47	47	47	45.
	Minimum	22	22	30	27	26	22	26	29	23	25	28	22	35	35	30	31	27	34	28	22	21	26	30	29	39	29	27	29	23	30	31	27
Fruit City	Maximum	50	53	48	44	40	36	34	45	48	51	45	58	52	60	45	43	51	50	46	43	35	36	44	58	62	49	54	60	51	46	48	47.
	Minimum	31	45	33	32	32	29	30	31	28	31	29	45	42	40	33	29	37	35	32	29	25	24	33	31	43	34	30	45	36	32	31	33.
Gano	Maximum	47	51	48	43	35	30	31	40	45	46	40	46	50	59	51	43	48	46	43	34	32	35	46	61	54	44	50	58	49	44	46	45.
	Minimum	21	24	27	29	29	23	26	28	23	25	23	21	35	34	31	29	25	33	29	21	20	22	30	31	41	28	25	28	25	29	23	27.
Hollister	Maximum	48	56	44	38	34	38	30	36	48	50	52	42	58	68	40	44	54	52	42	38	34	40	48	66	64	38	56	64	56	36	54	47.
	Minimum	20	26	34	36	30	26	28	28	24	34	28	32	38	28	40	34	32	36	32	26	24	26	32	22	38	34	32	34	36	20	24	30.
Ironton §§	Maximum	50	55	48	35	40	38	37	47	49	51	45	51	52	63	41	41	51	51	44	37	40	37	44	60	60	37	50	62	54	40	50	47.
	Minimum	19	22	27	31	32	28	28	31	23	29	27	20	33	32	34	31	28	32	31	28	21	24	30	28	40	32	22	24	23	30	24	27.
Lebanon	Maximum	39	43	38	38	30	34	36	37	40	48	48	50	60	63	42	53	56	52	41	32	35	38	54	64	54	51	58	62	54	46	51	46.
	Minimum	27	27	30	33	25	20	23	28	21	25	25	24	26	38	30	31	24	27	28	21	20	24	22	31	37	30	29	29	26	31	22	27.
Mountain Grove	Maximum	46	53	42	35	31	33	34	39	46	48	49	46	51	61	36	40	38	46	39	34	28	38	45	59	41	48	52	48	52	38	45	43.
	Minimum	18	21	30	32	31	22	23	26	23	26	28	23	27	35	33	29	25	29	24	21	21	16	24	29	35	29	27	29	27	31	20	26.
Neosho	Maximum	46	55	53	41	35	32	32	34	45	44	42	41	55	61	55	41	49	48	40	38	34	38	50	60	59	49	53	59	56	45	45	46.
	Minimum	11	24	36	32	27	23	26	27	28	32	26	31	25	29	30	31	27	33	28	23	21	25	30	30	35	31	29	28	35	32	22	28.
Rolla	Maximum	47	51	47	34	34	29	32	41	46	43	41	46	49	58	37	46	46	46	41	32	30	36	47	62	53	39	51	50	54	44	56	41.
	Minimum	21	28	28	30	29	23	23	29	21	25	27	23	25	36	31	30	28	33	30	24	21	23	25	31	33	30	28	31	26	27	25	27.
Springfield	Maximum	42	49	40	38	34	28	29	34	41	40	40	43	50	57	37	38	45	44	38	30	29	33	44	59	49	37	48	55	50	39	43	41
	Minimum	23	31	35	32	26	20	26	26	26	29	27	27	32	36	30	30	31	32	26	21	19	24	31	33	35	30	32	35	32	31	26	28.
Southwest Plain.																																	
Amoret	Maximum	44	48	46	36	29	30	30	37	36	40	39	37	55	52	57	44	49	43	40	35	34	41	51	57	56	41	50	56	54	47	49	44.
	Minimum	24	28	31	26	25	14	24	26	28	27	29	26	30	25	29	30	28	31	29	24	17	28	29	32	36	27	30	31	26	30	24	27.
Clinton	Maximum	43	50	43	36	31	32	34	38	40	42	37	37	53	49	47	43	48	45	43	35	38	40	52	61	54	42	51	58	56	48	50	44.
	Minimum	25	29	32	22	26	6	11	28	29	16	18	25	30	32	31	20	29	35	29	24	22	28	30	30	38	28	30	30	31	30	25	26
Harrisonville §§	Maximum	43	46	40	30	30	30	30	35	35	38	38	37	54	43	40	42	45	43	40	35	36	40	50	56	43	39	48	54	49	41	46	41.
	Minimum	22	22	30	30	25	17	17	25	28	22	22	21	25	30	30	30	27	28	28	24	18	20	28	18	32	26	26	29	25	25	24	25.
Lamar §§	Maximum	43	51	39	35	30	31	33	35	41	42	38	38	50	57	35	41	50	46	39	34	35	38	52	59	49	41	52	58	51	43	47	43.
	Minimum	24	27	31	34	25	17	17	26	28	29	26	28	30	32	29	30	30	32	29	23	17	17	28	32	35	30	29	32	32	33	25	27.
Lamonte	Maximum	45	48	43	35	32	30	32	35	37	42	39	38	50	47	41	48	45	44	39	31	38	39	49	59	49	39	45	49	54	52	47	42
	Minimum	23	25	23	25	27	20	25	26	27	20	28	30	32	37	30	31	26	35	30	26	21	26	29	30	35	27	29	30	23	27	23	27.
Marshall	Maximum	46	43	41	36	32	30	32	38	38	38	35	38	51	49	45	44	47	41	34	36	....	38	48	60	51	41	48	54	48	45	45	42.
	Minimum	23	26	32	26	26	20	26	29	20	19	29	24	31	35	31	31	35	30	23	20	....	27	30	31	35	27	30	29	24	30	24	27
Warrensburg	Maximum	45	46	40	33	32	31	31	35	37	44	36	37	57	47	43	42	46	44	40	36	35	40	49	58	52	40	48	54	46	45	46	42
	Minimum	25	29	32	26	26	20	27	29	32	33	30	22	31	37	31	32	29	34	29	23	21	28	28	34	35	27	29	32	26	30	25	28
Warsaw	Maximum	45	48	45	36	33	30	34	35	40	42	36	40	53	50	45	42	46	45	41	35	34	40	50	64	56	43	40	54	45	46	45	43.
	Minimum	21	24	34	28	28	20	28	30	30	36	30	26	32	32	32	33	28	30	30	23	25	29	33	28	37	30	30	25	23	32	22	28.
Northwest Plateau.																																	
Avalon	Maximum	42	41	38	38	33	32	35	39	40	39	34	38	42	49	46	44	45	43	40	36	37	39	47	60	54	38	46	52	43	50	46	42.
	Minimum	30	30	31	26	26	22	26	30	21	21	28	20	31	34	32	32	30	34	32	25	18	28	30	33	35	27	31	32	25	30	29	28.
Grant City	Maximum	39	36	35	32	25	32	32	33	36	33	33	38	41	45	38	44	45	41	35	30	35	40	50	56	52	35	44	45	42	38	43	38.
	Minimum	22	31	28	25	21	22	22	26	26	29	24	14	27	33	29	32	27	26	28	23	18	27	28	31	28	20	29	29	23	26	25	25.
Kansas City	Maximum	43	42	37	31	32	31	30	34	31	38	38	36	51	47	38	45	44	38	37	33	35	41	49	54	46	38	44	52	42	43	46	40.
	Minimum	28	33	31	25	25	21	26	29	28	29	30	26	32	33	32	32	29	33	27	26	21	29	31	39	30	26	30	35	29	29	28	29.
Kidder §§	Maximum	38	38	35	27	30	30	31	35	35	31	33	39	45	43	36	43	41	35	37	30	36	38	47	55	37	35	43	49	42	42	44	38
	Minimum	20	31	29	26	25	21	21	28	25	24	29	19	30	30	31	33	28	31	32	27	20	29	28	35	36	26	29	29	25	28	24	27.
Lexington §§	Maximum	45	43	34	29	33	32	34	36	38	40	38	34	46	48	39	43	45	43	43	33	37	41	50	59	41	42	48	56	48	46	48	41.
	Minimum	23	27	32	28	25	21	26	29	27	22	30	19	30	35	31	32	28	35	30	23	19	28	29	35	37	26	30	31	24	31	25	28.
Maryville §§	Maximum	38	35	34	29	31	32	33	35	35	33	38	41	48	41	39	46	43	33	34	32	38	43	51	57	37	35	42	50	44	42	45	39
	Minimum	19	19	28	24	24	21	21	21	25	21	22	19	19	29	29	29	24	24	24	22	17	20	25	25	32	18	18	28	23	23	23	25.
Oregon	Maximum	37	38	41	37	32	32	32	35	37	35	38	41	47	49	46	43	42	38	36	31	35	39	46	56	52	33	41	51	50	39	41	40
	Minimum	17	30	29	23	21	19	22	24	25	23	29	24	26	28	29	30	23	25	26	22	17	27	26	34	27	26	27	28	25	26	23	25.
St. Joseph	Maximum	40	38	35	31	30	31	30	34	34	31	39	40	50	42	37	47	43	36	35	30	36	41	48	55	38	35	43	51	43	43	45	39
	Minimum	22	31	31	25	23	20	24	26	27	25	27	24	29	31	31	32	27	28	24	21	19	29	28	38	27	24	29	30	26	29	25.	26
Trenton	Maximum	38	39	38	31	35	35	34	37	36	38	33	38	44	46	42	43	44	41	39	31	36	38	45	56	51	36	46	46	42	41	42	40
	Minimum	26	29	30	25	25	24	22	29	21	21	25	19	29	31	31	31	29	32	31	25	19	18	19	32	34	23	31	31	21	28	24	26.

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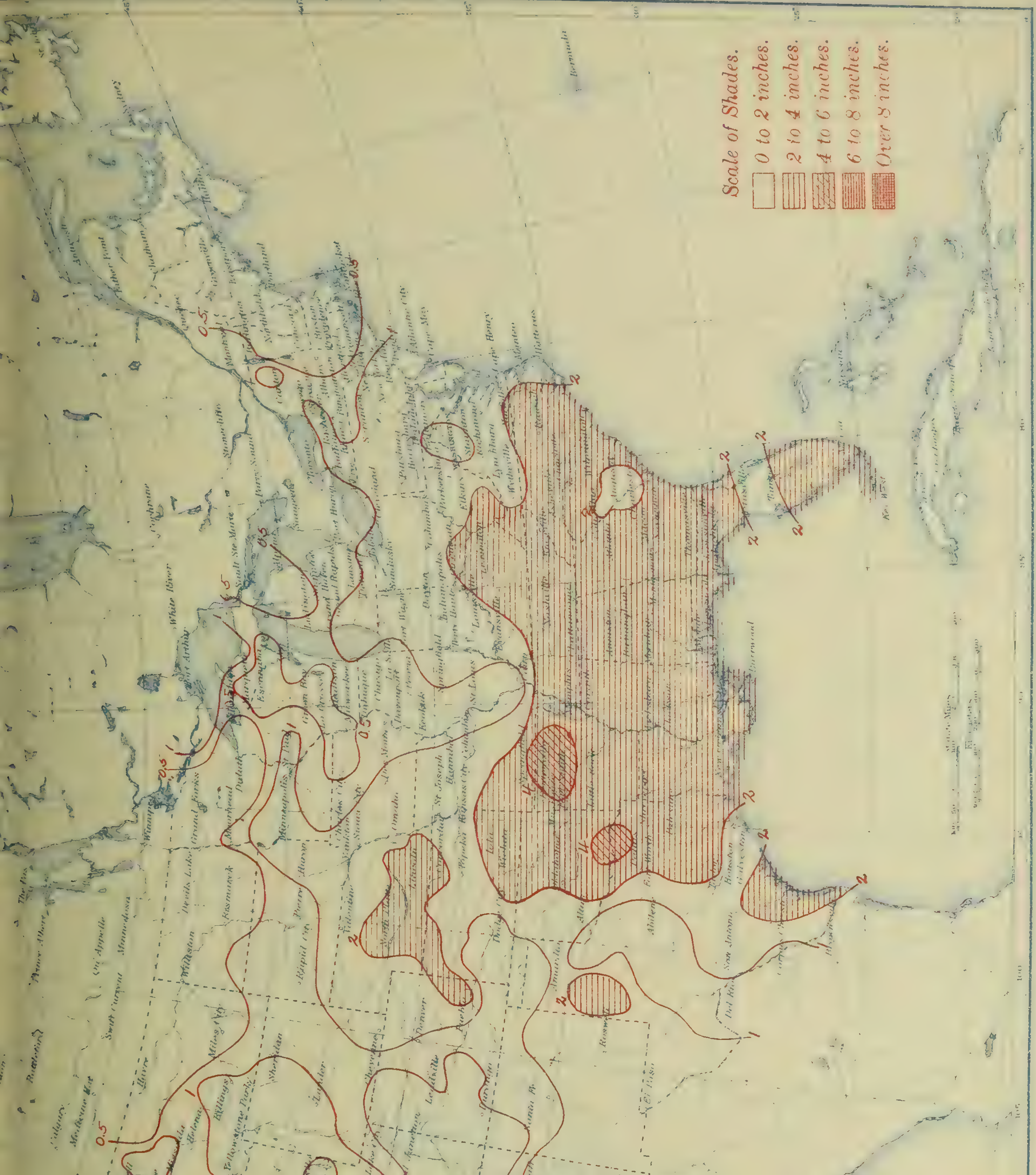
*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged

the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

15 Stack

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APRIL, 1915

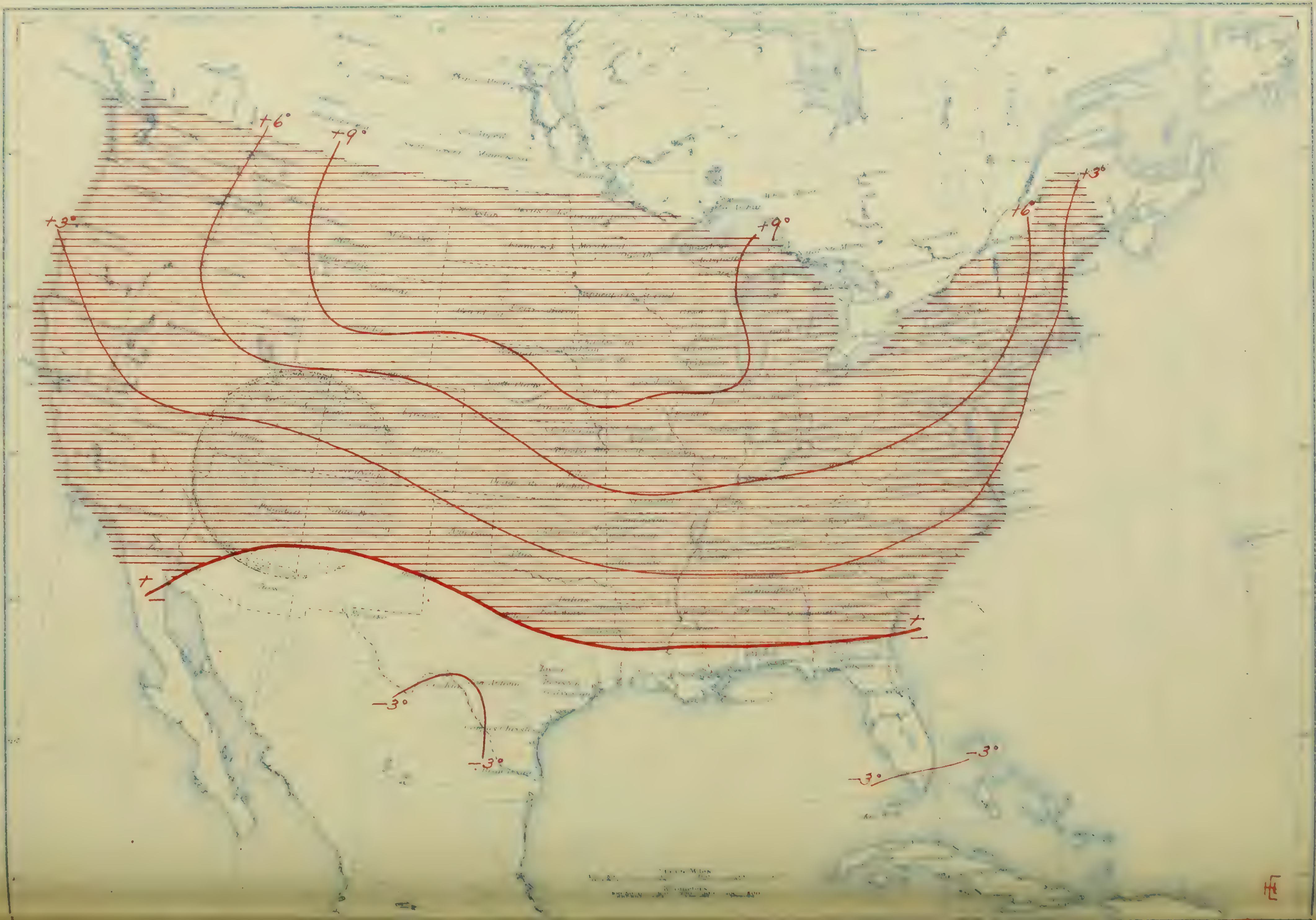
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 28, 1915

Departure of the Mean Temperature from the Normal, April, 1915.



S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

XIX. COLUMBIA, MO., APRIL, 1915. No. 4

GENERAL SUMMARY.

ril, 1915, was noticeable for its unusual warmth, small ll, and large amount of sunshine. In many respects it was r to the same month in 1914 being especially favorable rm work, and vegetable growth, after the first three or lays. Except in one or two localities, there were no freez- mperatures after the 3rd or 4th, and all vegetation, which ackward for the season, made rapid growth after those . At the close of the month the general crop outlook was good, though pastures and meadows were in need of more ure.

mean temperature, 61.9°, has been equaled but once) since the beginning of temperature records in 1888. It t be said that Missouri experienced little or no real spring er this season. March and the first three or four days of were cold, but immediately following the 4th practically er weather prevailed to the 10th, and, with the exception 11th, 12th and 13th, summer conditions obtained to the of the month. On and after the 15th heat steadily in- d, the daily temperature excess averaging more than 10°. compared with records beginning about 47 years ago, the t month ranks among the driest of its name, although not riest. The rainfall of the present month was in the form al showers, being in most instances rather light; but they as a rule, timely, and afforded sufficient moisture for t needs, save perhaps for grasses.

cepting quite a severe local storm in Webster County on vening of the 8th, which resulted in some loss in prop- the month was remarkably free from severe atmospheric bance.

PRESSURE.

during the preceding month of March, high pressure areas y dominated during April, and as a result the weather was stable and uniform than is usually the case in this month. nean sea-level pressure for the State, as determined from ports of 8 stations, was 30.03 inches, or .05 inch above l.

TEMPERATURE.

monthly mean temperature, as determined from the ls of 68 stations, was 61.9°. The mean departure from ormal for 52 stations having 10 or more years' record was 5.5°. The mean temperature and departure from normal ch division were as follows: northeast plain, 61.1°, or above normal; southeast lowlands, 63.7°, or 5.7° above al; Ozark plateau, 61.9°, or 5.7° above normal; southwest , 61.8°, or 6.4° above normal, and northwest plateau, , or 8.1° above normal. The highest local monthly mean 5.6° at Caruthersville, and the lowest was 57.7 at Union- The highest temperature recorded was 96°, at Maryville e 28th, and the lowest was 18°, at Goodland on the 1st. eratures were 32° or lower on an average of one day, and were 90° or above on two days, There were, as a rule, no ng temperatures after the first three or four days.

HUMIDITY.

mean relative humidity for the State was 72 per cent, or 7 per cent below normal.

PRECIPITATION.

average precipitation for the State, 80 stations reporting, .03 inches. The departure from the normal for 67 sta- having 10 or more years' record was minus 1.82 inches. verage for the northeast plain was 2.11 inches, or 1.40 inches below normal; southeast lowlands, 1.58 inches, or 2.79 inches below normal; Ozark plateau, 2.53 inches, or 1.89 inches below normal: southwest plain, 2.25 inches, or 1.58 inches below normal, and northwest plateau, 1.67 inches, or 1.46 inches below normal. The greatest local monthly amount was 4.27 inches at Hermann, and the least was 0.90 inch, at Patton, in the southeast, and Trenton, in the northwest.

Snow flurries occurred at a few stations in all divisions during the first two or three days, but it melted about as fast as it fell.

The average number of days with 0.01 inch or more precipitation was 7.

WIND.

The prevailing winds were from the south. The month was less windy than usual. At Columbia the total movement was 1,386 miles less than normal. Fresh to strong winds occurred locally on the 8th, 10th, 23rd and 29th.

SUNSHINE AND CLOUDINESS.

The large amount of sunshine was a marked feature of the weather of the month. For the State as a whole it averaged about 10 per cent above normal, but along the Mississippi River it was even greater than this. The average number of clear days was 16, partly cloudy, 8, and cloudy 6.

MISCELLANEOUS PHENOMENA.

Halos, lunar—22d, 26th and 28th.

Halos, solar—4th, 5th, 6th, 7th, 8th, 9th, 10th, 18th, 19th, 20th and 30th.

Thunderstorms (or thunder heard)—8th, 10th, 18th, 20th, 22d, 27th, 28th, 29th and 30th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	30.05	74	......	254	64	5,772	8.0	40	nw	10
Hannibal	30.05	74	......	....	....	6,695	9.3	32	se	4
Kansas City	30.00	69	51	258	65	7,677	10.7	38	n	10
St. Joseph	30.00	76	51	243	61	5,946	8.3	37	nw	10
St. Louis	30.04	67	46	309	78	9,782	13.6	50	s	8
Springfield	30.03	70	55	286	72	7,873	10.9	42	nw	29
Cairo, Ill	30.05	71	50	....	....	6,470	9.0	30	sw	10
Keokuk, Iowa	30.04	75	54	298	74	3,082	4.2	26	sw	27

COMPARATIVE DATA FOR APRIL.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	57.9	+2.8	91	20	1.83	−1.89	......	....	5	....	....	....
1889	55.7	+0.6	90	26	2.52	−1.20	......	....	8	....	....	....
1890	56.2	+1.1	93	24	3.17	−0.55	......	....	8	....	....	....
1891	56.8	+1.7	93	15	3.90	+0.18	......	....	9	....	....	....
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	14	8	8
1896	61.9	+6.8	92	17	3.51	−0.21	3.00	0	9	11	12	7
1897	54.4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T.	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	0.7	9	11	10	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	4.35	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	1.2	9	11	10	9
1904	49.0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	54.9	−0.2	92	20	3.19	−0.53	4.00	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.48	2.45	0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	53.5	−1.6	89	20	4.99	+1.27	4.27	T.	10	12	8	11
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6

Climatological data for April, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	2.79	−1.21	0.87	0	7	21	4	5	se	C. Randecker.
Brunswick	Chariton	652	36	61.3	+ 7.0	88	28	25	3	46	2.49	−0.71	0.90	0	8	12	4	14	e	Louis Benecke.
Columbia	Boone	784	26	62.0	+ 7.7	86	23	28	3	33	2.04	−1.66	0.77	0	8	12	8	10	se	U. S. Weather Burea
Fayette	Howard	725	31	60.8	+ 5.7	87	28	28	3	34	2.11	−1.34	0.99	0	7	20	5	5	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	61.0	+ 6.9	87	28	25	3	41	2.70	−1.48	1.40	0	6	16	0	14	s	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	1.04	−3.03	0.45	0	7	12	8	10	se	J. W. Pulham.
Hannibal	Marion	534	23	61.0	+ 7.4	84	25	30	3	31	2.06	−1.19	0.83	T.	8	11	13	6	sw	U. S. Weather Burea
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	4.27	+0.47	1.50	0	8	15	9	6	e	C. T. Maushund.
Jefferson City	Cole	628	30	62.6	+ 5.4	90	28	27	3	46	1.52	−2.07	0.97	0	8	21	0	9	s	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	3.32	......	1.79	0	6	....	....	....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	60.8	+ 7.4	84	16†	24	4	39	2.56	−0.45	1.08	T.	8	18	7	5	se	J. T. Farrell.
Macon	Macon	881	18	60.0	+ 6.0	86	28	25	1	43	1.36	−1.43	0.59	0	6	12	11	7	se	John A. Cook.
Mexico	Audrain	797	38	60.8	+ 6.5	87	24	23	1	43	2.20	−1.29	1.00	0	7	18	3	9	s	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	62.0	+ 6.0	87	27†	27	3	32	1.95	−2.25	0.56	0	8	13	13	4	s	E. E. Steines.
Palmyra	Marion	652	4	59.6	.....	84	24†	22	4	46	2.27	−1.33	0.85	0	5	9	19	2	sw	W. B. Markell.
St. Catherine	Linn	914	3	59.9	.....	84	28	28	3	32	1.54	......	0.49	0	9	11	18	1	se	L. D. Baker.
St. Charles	St. Charles	614	38	61.8	+ 6.4	87	27	25	3	34	1.64	−1.76	0.83	0	5	16	8	6	s	L. C. Saeger
St. Louis (1)	St. Louis City	717	45	63.2	+ 7.1	86	27	30	3	25	1.20	−2.32	0.59	T.	8	18	8	4	s	U. S. Weather Burea
St. Louis (2)	......do	578	4	62.4	.....	86	23†	29	3	26	1.24	......	0.55	T.	7	16	11	3	s	St. Louis University.
Steffenville	Lewis	576	23	61.5	+ 8.8	87	25†	32	13	40	2.47	−1.16	0.90	0	6	12	15	3	s	Frank Hall.
Sublett ‡‡	Adair	1,000	35	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Lewis Spriggs.
Unionville	Putnam	1,072	23	57.7	+ 6.8	83	28	24	3	38	1.43	−2.23	0.50	0	7	12	8	10	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	2.15	......	1.12	0	3	....	....	....	.....	C. B. Ellis.
Warrenton	Warren	865	25	60.6	+ 5.9	87	27	25	1	44	2.42	−1.47	1.45	0	5	14	7	9	s	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	1.15	−2.92	0.70	0	3	23	3	4	s	D. L. Albert
Cardwell	Dunklin	225	5	63.8	.....	90	28	30	1	40	2.02	......	1.02	T.	3	24	5	1	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	65.6	+ 5.9	92	28	30	1	34	0.93	−2.94	0.75	0	3	25	4	1	se	H. E. Averill.
Doniphan	Ripley	440	11	62.6	+ 5.0	89	28	26	1	45	3.25	−2.13	1.60	0	4	21	2	7	s	W. W. Martin.
Jackson	Cape Girardeau	458	25	64.4	+ 7.9	93	28	26	1	44	0.99	−3.55	0.73	0	5	16	9	5	s	L. M. Bean.
Marble Hill	Bollinger	420	24	62.8	+ 6.7	90	25†	25	1†	40	1.60	−3.04	0.95	0	4	17	11	2	s	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	1.19	−3.18	0.60	0	4	19	6	5	se	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	0.90	......	0.77	0	2	21	0	9	s	Christian Seabaugh
Poplar Bluff	Butler	333	12	63.0	+ 3.1	91	28	33	2	39	2.56	−1.87	1.54	0	6	19	3	8	......	M. S. Wiseheart.
Sikeston	Scott	328	15	64.0	+ 6.3	91	28	28	1	38	1.35	−2.88	0.96	0	4	14	13	3	s	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	63.6	+ 5.3	87	28	30	1	32	1.01	−2.56	0.86	0	5	14	9	7	s	U. S. Weather Burea
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.61	−2.11	0.85	0	4	22	2	6	s	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	1.70	−2.10	1.24	0	4	16	9	5	w	Mrs. Nellie V. Houser
Belle	Maries	1,000	24	....	.....	90	28	....	....	....	4.05	−0.03	1.80	0	....	....	....	....	......	A. J. Wolford.
Birchtree	Shannon	1,200	22	62.2	+ 5.2	91	28	24	1	34	1.97	−2.72	1.45	0	4	22	4	4	s	V. H. Kirkendall.
Bolivar	Polk	1,020	28	62.5	+ 6.4	89	28	25	1	38	2.41	−1.43	0.68	0	7	19	10	1	se	A. C. Fink.
Cassville	Barry	1,500	5	58.5	.....	84	27	20	4	49	2.85	......	1.10	0	7	23	5	2	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	64.7	.....	90	27†	27	1	37	2.92	......	1.73	0	3	26	4	0	n	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	62.1^e	+4.8	88	28†	22	3	42	.....	......	....	0	....	16^d	4^d	6^d	s	H. E. Dean.
Duncan	Webster	1,400	3	60.2	.....	87	28	21	1	34	4.24	......	2.08	0	10	16	9	5	s	C. A. Mingus.
Eldon	Miller	934	15	62.3	.....	90	28	26	3	34	2.42	−2.31	0.80	0	8	9	20	1	ne	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	62.8	.....	91	28	33	1	25	1.77	......	1.70	0	2	23	7	0	s	R. C. Walton.
Gano ‡‡	Dent	1,250	12	62.2	+ 6.2	91	28	22	3	36	2.02	--3.07	0.89	T.	6	17	7	6	s	A. C. Leach.
Goodland	Iron	1,000	11	59.1	+ 4.6	91	28	18	1	44	1.31	−4 80	1.13	0	2	16	8	6	s	F. M. Adams.
Hollister	Taney	1,000	7	64.2	.....	90	28	24	3	46	2.35	−1.39	1.00	0	5	27	0	3	sw	W. P. Chapmann
Houston	Texas	1,280	23	61.5	+ 5.9	88	28	24	1	37	2.90	−1.86	1.16	T.	5	15	10	5	s	R. F. Harmon.
Ironton	Iron	925	38	60.2	+ 4.8	91	28	23	1†	45	1.42	−2.96	1.20	T.	6	9	19	2	s	W. H. Delano.
Koshkonong	Oregon	911	15	65.5	+ 8.0	90	28	28	1	29	2.13	−2.91	1.08	0	7	10	12	8	se	R. M. Hitt.
Lebanon	Laclede	1,265	27	63.6	+ 7.3	93	28	25	1	41	2.83	−1.78	1.35	0	4	20	4	6	sw	O. L. Weissgerber.
Lockwood	Dade	1,088	21	62.2	.....	86	28	28	1†	30	2.29	−1.17	0.80	0	8	17	4	9	se	C. S. Crow.
Mountain Grove	Wright	1,490	17	60.6	+ 6.1	89	28†	24	1	36	3.02	−1.40	1.10	0	6	18	3	9	nw	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	61.2	+ 5.5	90	28	24	3	38	2.88	−0 58	0.82	0	10	20	5	5	sw	J. R. White & Son.
Neosho	Newton	1,083	33	61.4	+ 3.2	87	28	23	3	40	3.99	−0.24	1.84	0	10	18	6	6	sw	W. O. Buck.
Rolla	Phelps	1,139	34	61.4	+ 6.3	90	28	25	1	42	2.37	−2.00	1.10	0	5	21	6	3	s	Prof. Elmo G. Harris
Springfield	Greene	1,350	28	61.8	+ 6.1	84	28	29	1	28	2.78	−1.08	1.58	T.	10	20	7	3	se	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	61.8	.....	86	27†	24	3	39	2.67	......	0.96	T.	10	9	11	10	sw	Darby Fruit Farm.
Clinton	Henry	800	29	62.8	.....	89	28	25	2	40	2.95	−1.26	1.30	0	6	15	15	0	se	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	61.0	+ 7.0	89	28	23	3	47	2.76	−0.77	0.75	0	10	10	6	14	sw	A. J. Sharp.
Lamar	Barton	964	35	61.7	+ 4.8	86	28	25	3	39	1.29	−2.82	0.47	T.	7	13	4	13	se	E. H. Adams.
Lamonte	Pettis	863	27	60.4	.....	89	28	26	2	48	2.35	−1.28	0.85	0	6	11	17	2	sw	J. Ed. Hall.
Marshall	Saline	779	25	60.8	+ 6.8	90	28	25	3	36	2.90	−0.86	0.84	0	6	16	9	5	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	62.1	.....	84	28	29	1	26	1.50	−2.30	0.60	0	8	....	....	....	......	C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	1.75	−2.13	0.74	0	7	....	....	....	sw	W. E. Mathews
Warrensburg	Johnson	883	37	62.6	+ 6.6	90	28	26	3	34	2.28	−0.67	0.59	0	13	14	10	6	sw	Geo. H. Collins.
Warsaw	Benton	883	11	62.8	+ 7.0	90	28	22	3	41	2.24	−2.12	0.48	0	12	15	12	3	sw	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	2.23	......	1.11	0	7	13	11	6	e	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	61.6	+ 8.7	90	28	27	3	35	1.87	−1.99	0.65	0	9	17	12	1	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	60.5	+ 9.6	91	28	21	3	41	1.30	−1.75	0.55	T.	7	8	9	13	se	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	1.44	......	0.50	0	9	13	4	13	....	Hocey O. Dupy
Conception	Nodaway	982	31	59.7	+ 7.7	88	28	31	1†	31	1.60	−1.15	0.46	0	8	7	15	8	sw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	60.0	+ 8.4	90	28	26	3	38	2.09	−0.86	0.68	0	7	19	6	5	s	W. H. Campbell.
Kansas City	Jackson	963	27	62.2	+ 7.9	86	28	31	1	30	2.33	−0.96	1.01	T.	9	11	11	8	s	U. S. Weather Bureau
Kidder	Caldwell	1 017	25	60.5	+ 7.9	86	28	30	3	31	1.72	−1.36	0.82	0	9	14	12	4	se	J. F. Sharp.
Lexington	Lafayette	813	34	62.0	+ 7.8	90	28	28	3	35	1.74	−1.54	0.45	0	7	13	1	16	s	J. W. Keithley.
Liberty	Clay	864	27	62.4	+ 7.4	91	28	26	3	34	2.02	−1.16	0.78	0	9	13^a	15^a	1^a	sw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	59.6	+ 8.7	96	28	25	1	41	1.48	−1.70	0.37	0	11	18	2	10	s	J. R. Brink.
Oregon	Holt	1,113	60	59.6	+ 7.1	85	28	23	3	32	1.45	−1.93	0.47	0	11	11	12	7	se	Tom Curry.
St. Joseph	Buchanan	967	44	61.6	.....	90	28	29	3	31	2.05	−1.08	0.97	0	12	10	11	9	s	U. S. Weather Bureau
Tarkio	Atchison	1,150	4	59.6	.....	93	28	26	3	36	1.34	......	0.30	0	8	16	7	7	s	John F. Frazier.
Trenton	Grundy	812	21	60.8	+ 8.0	88	28	27	3	31	0.90	−2.04	0.40	0	8	13	7	10	s	W. H. Estes.
State means and extremes				61.9	+ 6.5	96	28	18	1	49	2.03	−1.82	2.08	T.	7	16	8	6	s	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D No. 1; of Sublett, Kirksville, R.F.D. Sublett.

Daily precipitation for April, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
onville ‖	Missouri	....	....	....	....	....	....	....	....	.55	.87	.06	....	....	....	....	....	....	....	....	....	.54	.56	.16	....	....	T.	....	....	.05	....	....	2.79
unswick ‖	Grand	....	....	....	....	....	....	....	....	.21	.56	.04	....	....	....	....	....	....	....	....	....	.08	.22	.90	....	.05	T.	....	....	.43	....	....	2.49
lumbia***	Missouri	....	....	....	....	....	....	....	.38	.38	.39	.05	....	T.	....	....	....	....	T.	....	.19	.10	.51	....	....	....	T.	....	T.	....	.04	....	2.04
yette	......do	....	....	....	....	....	....	....	.33	.49	.50	....	....	....	....	....	....	....	T.	....	.13	.25	.26	....	....	....	T.	....	.15	....	T.	....	2.11
lton	......do	....	....	....	....	....	....	....	.03	1.15	1.40	.04	....	.01	....	....	....	....	....	....	....	.07	....	....	....	....	....	....	....	....	....	....	2.70
rin	Mississippi	....	....	....	....	....	....	....	.45	....	.08	....	....	.03	....	....	....	....	....	....	....	.16	.11	....	....	....	.02	....	.19	....	....	....	1.04
nnibal***	......do	T.	....	....	T.	....	T.	....	.68	.15	.68	.03	....	.02	....	....	....	T.	....	.01	T.	.27	.22	....	....	....	T.	....	T.	....	T.	....	2.06
rmann	Missouri	....	....	....	....	....	....	....	....	.50	1.50	.04	....	....	....	....	....	....	....	T.	T.	.05	.72	1.40	....	....	....	....	.02	.04	....	....	4.27
ferson City ‖	......do	....	....	....	....	.05	....	....	....	.30	.97	.03	....	....	....	....	....	....	....	....	....	....	.05	.02	....	....	....	.02	....	.08	....	....	1.52
ytesville	Chariton	....	....	....	....	....	....	....	.03	.60	T.	....	....	....	....	....	....	....	.22	....	....	.26	.42	....	....	....	....	....	1.79	....	....	....	3.32
uisiana	Mississippi	....	T.	....	....	....	....	....	.08	.42	.65	.18	....	....	.01	....	....	.02	....	....	....	.12	1.08	....	....	....	T.	....	....	....	T.	....	2.56
acon	Chariton	....	....	....	....	.13	....	....	....	.33	.59	.08	....	....	T.	....	....	....	....	T.	....	.08	T.	....	....	....	T.	....	....	.15	....	....	1.36
exico ‡	Mississippi	....	....	....	....	....	....	....	....	.97	1.00	.06	....	....	....	....	....	....	....	....	....	.02	.01	.06	....	....	....	T.	....	.08	T.	....	2.20
kfield	Meramec	....	....	....	....	....	....	....	.03	.33	.56	.09	....	....	....	....	....	....	....	T.	....	.10	.54	....	....	....	....	.04	.26	....	T.	....	1.95
lmyra ‡	Mississippi	....	....	....	....	....	....	....	....	.71	.57	.06	....	....	....	....	....	....	....	....	....	.08	.85	....	....	....	....	....	....	....	....	....	2.27
Catherine	Grand	....	....	....	....	....	....	....	.49	T.	.22	.12	....	.02	....	....	....	....	....	....	....	.12	.19	.32	T.	T.	.02	....	.04	....	....	....	1.54
Charles	Missouri	....	T.	....	....	....	....	....	....	.33	.42	.01	....	....	....	....	....	....	....	....	....	.05	.83	....	....	....	....	....	....	....	....	....	1.64
Louis (1)***	Mississippi	T.	T.	....	....	....	T.	....	.08	.59	.25	.04	....	T.	....	....	....	....	....	....	.01	.17	.04	....	....	....	T.	.02	T	....	T.	....	1.20
Louis (2)	......do	T.	....	....	....	....	....	....	.01	.55	.43	.03	....	....	....	....	....	....	....	....	T.	.13	.08	....	....	....	....	.01	....	....	T	....	1.24
renville	......do	....	....	....	....	T.	....	....	.05	.50	.70	.05	....	T.	....	....	....	....	....	T.	....	.27	.90	....	....	....	T.	....	T.	....	T.	....	2.47
lett	......do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ionville ‖	Grand	....	....	....	....	....	....	T.	....	.50	....	.15	....	....	....	....	....	....	....	....	....	T.	.15	.06	.30	.15	....	....	....	.12	....	....	1.43
ndalia	Mississippi	....	....	....	....	....	....	.75	....	1.12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.28	....	....	....	2.15
rrenton ‖	......do	....	....	....	....	....	....	....	....	.42	1.45	.02	....	....	T.	....	....	....	....	....	T.	T.	.06	.47	....	....	....	T.	....	....	....	....	2.42
utheast Lowlands.																																	
pe Girardeau	Mississippi	....	....	....	....	....	....	....	....	....	.70	.40	....	....	....	....	....	....	....	....	....	.05	....	....	....	....	....	....	....	....	....	....	1.15
dwell	......do	....	T.	....	....	....	....	....	....	....	1.02	....	....	....	....	....	....	....	....	....	.30	.70	....	....	....	....	....	T.	....	....	....	....	2.02
ruthersville	......do	....	....	....	....	....	....	....	.03	....	.75	....	....	....	....	....	....	....	....	....	T.	.15	....	....	....	....	....	....	....	....	....	....	0.93
niphan	Black	....	....	....	....	....	....	....	T.	1.60	1.10	....	....	....	....	....	....	....	....	....	.10	.45	....	....	....	....	....	T.	....	....	....	....	3.25
kson	Mississippi	....	....	....	.02	....	....	....	.02	.73	.20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	....	0.99
rble Hill	......do	....	....	....	....	....	....	....	....	....	.95	....	....	....	....	....	....	....	....	....	.10	.15	....	....	....	....	....	.40	....	....	....	....	1.60
w Madrid ‖	......do	....	....	....	....	....	....	....	....	.04	.60	....	....	....	....	....	....	....	....	....	....	.45	.10	....	....	....	....	....	....	....	....	....	1.19
ton (near)	......do	....	....	....	....	....	....	....	....	.77	....	....	....	....	....	....	....	....	....	....	.13	....	....	....	....	....	....	....	....	....	....	....	0.90
plar Bluff	Black	....	....	....	....	....	....	....	.10	1.54	....	.03	....	....	....	....	....	....	....	....	.80	....	....	....	....	....	....	.05	....	....	.04	....	2.56
eston	Mississippi	....	....	....	....	....	....	....	.01	....	.96	....	....	....	....	....	....	....	....	....	.16	.22	....	....	....	....	....	....	....	....	....	....	1.35
ro, Ill.***	......do	....	....	....	....	.01	....	....	T.	.15	.71	....	....	....	....	....	....	....	....	....	T.	.11	T.	....	....	....	....	T.	....	....	.03	....	1.01
ark Plateau.																																	
ington ‖	Gasconade	....	....	....	....	.05	....	....	....	.85	.65	....	....	....	....	....	....	....	....	....	....	.06	....	T.	....	....	....	....	....	....	....	....	1.61
gnell	Osage	....	....	....	....	....	....	....	....	....	1.24	.01	....	....	....	....	....	....	....	....	....	.25	.20	....	....	....	T.	....	....	....	....	....	1.70
ie	Meramec	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.05
chtree	Black	....	....	....	....	....	....	....	....	.15	1.45	....	....	....	....	....	....	....	.17	....	....	.20	....	....	....	....	....	....	....	....	....	....	1.97
ivar	Osage	....	....	....	....	....	....	....	.22	.35	.60	....	....	....	....	....	....	....	....	....	.68	.20	....	....	....	....	.03	....	....	....	.33	....	2.41
sville	White	....	....	....	....	....	....	....	.10	1.10	.02	....	....	....	....	....	....	....	....	.86	....	.40	....	....	....	....	....	....	....	.07	.30	....	2.85
cker	Gasconade	....	....	....	T.	....	....	....	....	1.73	.76	....	....	....	....	....	....	....	....	....	....	.23	....	....	....	....	....	....	....	T.	....	....	2.92
n	Neosho	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ran	Osage	....	T.	....	....	....	....	....	.01	2.08	.79	....	....	....	....	....	....	....	....	T.	.05	.25	.01	.10	....	....	T.	....	.44	.11	.40	....	4.24
on	......do	....	....	....	....	.16	....	....	.34	.80	.70	....	....	....	....	....	....	....	.03	....	.13	.05	T.	....	....	....	....	T.	....	....	.21	....	2.42
it City	Black	....	....	....	....	....	....	....	....	....	1.70	....	....	....	....	....	....	....	....	....	....	.07	....	....	....	....	....	....	....	....	....	....	1.77
no	Meramec	....	T.	....	....	.10	....	....	.11	.75	.89	T.	....	....	....	....	....	....	....	....	.11	.06	....	....	....	....	....	....	....	....	....	....	2.02
dland	Black	....	....	....	....	....	....	....	....	....	1.13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.18	....	....	....	1.31
llister	White	....	....	....	....	....	....	....	....	1.00	.30	....	....	....	....	....	....	....	....	....	.55	....	....	....	....	....	.10	....	....	....	.40	....	2.35
ston	Gasconade	....	T.	....	....	....	....	....	.24	.70	1.16	....	....	....	....	....	....	....	T.	....	T.	.25	T.	....	....	....	....	.55	....	....	T.	....	2.90
nton ‖	Mississippi	....	....	T.	....	T.	....	....	....	.10	1.08	.12	....	....	....	....	....	....	....	....	....	.03	.02	....	....	....	....	....	.07	....	....	....	1.42
konong	Black	....	....	....	....	....	....	....	.09	.16	1.08	....	....	....	....	....	....	....	....	....	.02	.37	.01	....	....	....	....	....	.40	....	....	....	2.13
anon ‖	Osage	....	....	....	....	....	....	....	....	.60	1.35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.78	.10	....	....	2.83
kwood	......do	....	....	....	....	....	....	....	.29	.09	.80	....	....	....	....	....	....	....	....	....	.25	.06	T.	....	.29	....	....	....	....	.07	.44	....	2.29
untain Grove ‖	White	....	....	....	....	....	....	....	....	.44	1.05	....	....	....	....	....	....	....	....	....	....	.18	.21	.04	....	....	....	T.	1.10	....	....	....	3.02
unt Vernon	Neosho	....	....	....	....	....	....	....	.15	.50	.82	....	....	....	....	....	....	....	....	.24	.35	.03	....	.22	....	....	.10	....	....	.10	.37	....	2.88
sho	......do	....	....	....	....	....	....	....	.21	.30	1.84	....	....	....	....	....	....	....	....	.15	.81	.04	T.	.12	T.	.01	.24	....	....	....	.27	....	3.99
la	Meramec	....	....	....	....	.03	....	....	....	1.10	.96	....	....	....	....	....	....	....	....	....	....	.09	.19	....	....	....	....	....	....	....	....	....	2.32
ingfield***	White	....	T.	....	....	....	....	....	.36	1.27	.33	....	....	....	....	....	....	....	T.	....	.23	.07	.02	.02	....	....	.03	....	....	.05	.40	....	2.78
eatland	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
uthwest Plain.																																	
oret	Osage	....	T.	....	T.	T.	....	....	.10	T.	.40	....	....	....	....	....	....	....	....	....	T	T.	.96	.16	.20	.02	.17	....	.25	.09	.32	....	2.67
nton	......do	....	....	....	....	....	....	....	....	.15	1.30	....	....	....	....	....	....	....	....	....	....	....	.28	.10	....	.12	....	....	....	1.00	....	....	2.95
rrisonville ‖	......do	....	....	....	....	.08	....	....	....	.08	.75	....	....	....	....	....	....	....	....	....	.06	.06	....	.44	.33	.06	.24	....	....	.66	....	....	2.76
mar ‖	Neosho	....	....	T.	....	....	T.	....	....	.47	.25	....	....	....	....	....	....	....	....	....	.05	....	T.	.16	.17	T.	.11	....	....	.08	....	....	1.29
monte	Missouri	....	....	....	....	....	T.	....	.30	.85	....	....	....	....	....	....	....	....	....	....	.20	.10	.30	T.	....	....	T.	....	.60	....	T.	....	2.35
rshall	......do	....	....	....	....	....	T.	....	.41	.12	.60	....	....	....	....	....	....	....	....	....	T.	.15	.78	T.	....	....	T.	....	....	.84	T.	....	2.90
vada	Osage	....	T.	....	....	....	....	....	.10	....	....	....	....	....	....	....	....	....	....	....	....	.10	....	.20	.10	....	.20	.15	....	.05	.60	....	1.50
eola	......do	....	....	....	....	....	....	....	....	.74	.23	....	....	....	....	....	....	....	....	....	....	....	....	.18	.14	....	.11	.04	....	.31	....	....	1.75
rrensburg	Missouri	....	....	....	....	.01	T.	....	.30	.12	.59	.01	....	....	....	....	....	....	....	....	.06	.10	.42	.10	.01	....	.10	....	....	.24	.22	....	2.28
rsaw	Osage	....	....	....	....	.13	....	....	.37	.08	.39	....	....	....	....	....	....	....	....	T.	.48	.18	.05	....	....	....	.02	.04	.13	.19	.18	....	2.24
verly	Missouri	....	....	....	....	T.	....	....	....	.04	1.11	.01	....	....	....	....	....	....	....	....	....	.31	....	.35	.08	....	T.	....	....	.33	....	....	2.23
orthwest Plateau.																																	
don	Grand	....	....	....	T.	....	....	....	.65	....	.27	.08	....	.07	....	....	....	....	....	....	.10	.15	....	.32	....	T.	....	....	.08	....	.15	....	1.87
any	......do	T.	T.	....	....	T.	T.	....	.25	.55	....	.05	....	.04	....	....	....	....	T.	....	....	T.	.04	.15	.22	....	....	....	....	....	....	....	1.30
llicothe	......do	....	....	....	....	.10	....	....	....	.50	.14	.12	....	....	....	....	....	....	....	....	....	.07	.05	.24	.20	....	.02	....	....	....	....	....	1.44
ception	Missouri	....	....	....	....	....	.11	....	.46	....	....	.05	....	.13	....	....	....	....	....	....	.14	....	.08	.42	T.	....	.31	....	....	....	....	....	1.60
nt City	Grand	....	....	....	....	T.	T.	T.	.68	.13	....	....	....	T.	....	....	....	....	T.	....	....	....	....	.62	.16	.13	.12	.25	....	....	....	....	2.09
nsas City***	Missouri	....	....	....	....	....	....	....	.06	.53	.58	....	....	....	....	....	....	....	....	....	....	....	.12	.23	.04	....	.16	....	.29	....	.32	....	2.33
der ‖	Grand	....	....	....	....	T.	....	....	....	.13	....	.13	....	....	.12	....	....	....	....	....	....	.82	.03	.16	.20	....	.11	....	....	.02	....	....	1.72
ngton ‖	Missouri	....	....	....	....	....	....	....	....	.15	.45	....	....	....	....	....	....	....	....	....	....	.15	....	.20	.36	....	.11	....	....	.32	....	....	1.74
rty	......do	....	....	....	....	....	....	....	.28	.02	.78	.08	....	....	....	....	....	....	....	....	T.	....	.25	.11	.05	....	T.	....	....	.25	.20	....	2.02
yville ‖	......do	....	....	....	....	....	....	.05	....	.37	....	.15	....	.05	.04	....	....	....	....	....	....	.05	....	.02	.28	.05	.10	.32	....	....	....	....	1.48
gon	......do	....	....	....	....	....	.03	....	.25	.10	....	.13	....	.09	....	....	....	....	....	....	.07	....	.07	.13	.05	....	.47	....	....	....	.06	....	1.45
oseph***	Missouri	....	....	....	.02	....	T.	.01	.31	T.	.10	....	....	.08	....	....	....	....	....	....	.22	....	.19	.79	.11	.01	.16	....	....	....	.05	....	2.05
rio	......do	....	....	....	T.	....	T.	....	.30	.03	....	.12	....	.22	....	....	....	....	....	....	....	....	....	.18	.11	.10	.28	....	....	....	....	....	1.34
nton	Grand	....	....	....	T.	....	T.	....	.40	....	.11	....	....	T.	....	....	....	....	.03	....	....	.05	.03	.22	....	T.	.03	....	T.	....	.03	....	0.90

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 period, midnight to midnight.

** Precipitation in the next following measurement.

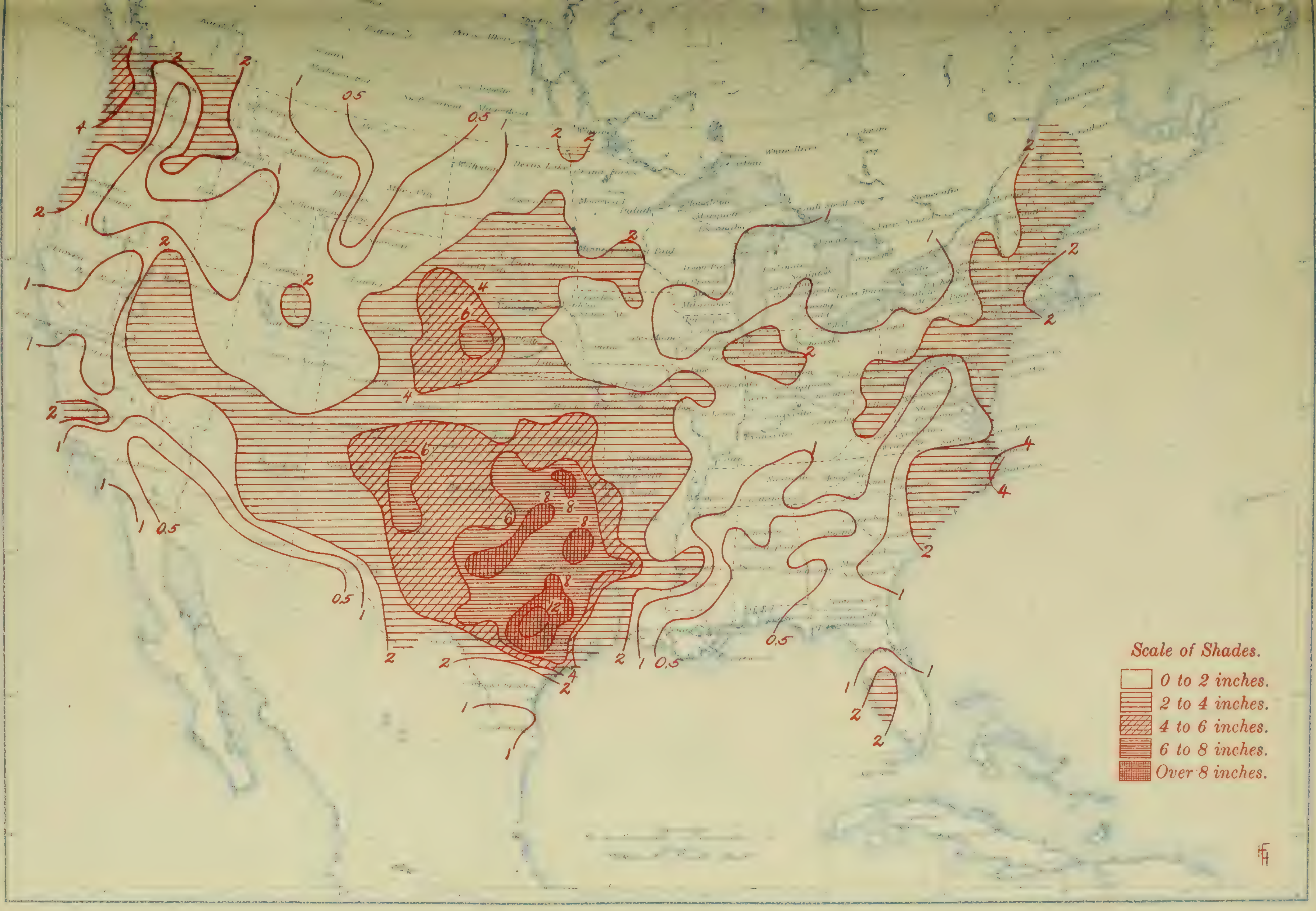
‡ Separate dates of fall not recorded.

Daily temperatures for April, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Northeast Plain.																																	
Brunswick §§	Maximum	43	49	57	72	79	74	75	75	70	71	65	62	61	72	81	84	86	81	83	81	73	78	82	79	83	78	82	88	73	73	....	73
	Minimum	31	34	25	26	45	46	50	51	54	51	44	38	38	42	47	48	52	55	53	53	57	58	64	60	60	63	62	55	57	47	....	[illegible]
Columbia	Maximum	40	46	54	71	75	76	75	77	70	69	63	58	60	71	77	81	79	76	84	78	76	78	86	84	84	78	83	85	73	73	....	72
	Minimum	33	36	28	38	49	51	52	58	57	51	45	43	41	46	50	53	55	57	57	56	56	61	64	60	64	65	58	56	54	46	....	51
Fayette	Maximum	39	44	53	70	76	73	75	76	68	68	50	58	59	71	78	82	82	77	82	78	73	76	83	81	83	76	80	87	72	71	....	71
	Minimum	32	33	28	36	46	49	50	54	56	49	41	40	40	45	47	53	52	53	57	55	56	60	62	61	65	66	62	54	53	49	....	[illegible]
Hannibal	Maximum	41	46	52	68	74	70	72	77	70	70	62	57	58	68	76	82	69	76	83	80	70	77	84	84	84	77	83	82	69	69	....	71
	Minimum	33	35	30	38	50	50	47	55	59	51	44	40	39	46	45	55	51	56	59	60	59	60	68	61	66	66	62	57	49	43	....	51
Jefferson City §§	Maximum	45	50	65	77	77	78	77	80	78	73	70	63	70	75	82	80	80	72	83	68	75	82	85	84	84	77	86	90	73	76	....	[illegible]
	Minimum	32	34	27	31	44	45	52	54	58	52	44	44	40	45	47	50	53	49	56	55	55	60	64	59	61	63	62	59	57	47	....	50
Macon	Maximum	42	47	54	70	76	72	71	76	69	69	63	58	58	71	78	82	75	76	83	80	74	81	84	85	84	78	81	86	72	74	....	72.
	Minimum	25	32	27	27	41	45	46	49	53	50	43	37	38	41	45	52	48	50	56	55	57	58	62	58	61	62	62	58	48	46	....	47
Mexico §§	Maximum	41	48	55	71	78	75	73	77	72	71	63	58	62	71	79	82	75	76	85	83	75	83	85	87	86	79	85	85	73	74	....	73
	Minimum	23	32	27	28	38	48	48	50	53	51	43	41	37	39	44	48	51	52	56	57	56	58	62	60	61	62	62	55	52	43	....	47
Oakfield	Maximum	41	48	53	66	76	76	77	77	76	70	65	60	60	67	73	83	74	82	86	80	70	80	86	83	84	83	87	87	72	75	....	73.
	Minimum	29	34	27	34	50	50	51	52	56	53	44	45	36	44	47	54	52	55	61	59	56	56	63	63	62	63	62	59	57	46	....	50
St. Catharine	Maximum	41	47	53	67	75	67	70	75	69	71	63	54	56	71	75	81	77	77	80	75	72	77	79	77	81	75	79	84	73	70	....	70
	Minimum	32	32	28	39	43	45	49	53	52	50	41	35	40	45	47	51	68	54	55	56	56	59	62	59	61	62	62	53	49	43	....	49.
St. Louis (1)	Maximum	42	48	51	62	74	77	77	76	77	69	64	58	61	65	71	82	72	79	85	80	72	82	85	83	85	83	86	85	74	72	....	72
	Minimum	34	36	30	38	51	57	52	56	58	55	47	45	39	46	50	57	52	54	65	63	59	63	66	64	65	65	63	64	60	56	....	53
Unionville§§	Maximum	42	46	52	56	74	62	71	76	70	71	61	58	56	73	80	81	77	80	82	80	76	82	78	76	80	76	78	83	68	72	....	70
	Minimum	26	30	24	30	40	42	38	46	50	46	40	32	36	38	42	48	46	48	50	52	53	55	60	56	58	60	56	57	45	40	....	44
Warrenton §§	Maximum	39	45	54	53	75	78	74	77	75	69	62	60	61	70	76	80	75	79	84	80	75	80	86	84	85	80	87	85	72	74	....	72.
	Minimum	25	32	27	32	31	52	49	49	55	52	43	43	35	38	45	49	50	52	60	54	57	59	63	61	60	63	61	60	55	47	....	48
Southeast Lowlands.																																	
Cardwell	Maximum	50	48	55	65	75	80	82	80	80	84	77	74	68	73	75	84	83	83	84	72	83	85	84	84	87	85	80	90	85	84	....	77.
	Minimum	30	36	35	32	53	52	55	53	52	57	50	44	42	47	46	44	48	48	53	55	57	65	60	60	53	62	60	55	56	50	....	50.
Caruthersville	Maximum	51	48	57	64	78	78	84	80	80	75	75	76	72	77	79	86	83	87	87	78	77	84	84	85	88	84	86	92	88	84	....	78.
	Minimum	30	36	36	31	50	52	52	53	59	59	55	45	42	48	48	56	53	53	55	59	60	60	69	65	60	64	64	62	62	52	....	53.
Doniphan	Maximum	49	47	56	64	81	77	80	78	78	72	73	73	66	72	74	84	82	81	81	78	79	83	82	82	84	84	82	89	86	80	....	75.
	Minimum	26	35	32	28	49	48	50	52	54	52	51	41	41	44	42	43	50	51	51	52	56	56	65	57	55	64	59	62	62	49	....	49.
Jackson	Maximum	49	50	51	67	84	83	85	80	80	77	70	66	68	70	78	89	81	83	90	84	78	89	88	85	91	82	88	93	85	81	....	78.
	Minimum	26	34	29	29	40	48	55	65	60	58	50	44	35	43	41	45	54	68	51	65	53	59	65	64	58	60	60	52	62	44	....	56.
Marble Hill	Maximum	45	48	54	62	81	80	82	80	81	75	75	69	70	75	78	84	79	85	86	86	75	80	85	88	90	82	85	90	80	82	....	77.
	Minimum	25	33	30	25	49	49	52	60	59	57	52	40	35	39	42	45	52	45	49	51	52	60	61	63	52	52	60	61	60	45	....	[illegible]
Poplar Bluff	Maximum	49	48	56	66	82	79	83	79	80	72	73	73	66	71	70	83	80	83	83	79	75	83	84	84	86	85	82	91	86	80	....	76
	Minimum	35	33	34	46	49	50	50	53	58	43	49	39	43	43	44	45	51	52	56	53	58	60	58	54	58	58	59	60	47	49	....	49.
Ozark Plateau.																																	
Birchtree	Maximum	42	43	54	63	79	76	78	73	76	68	67	70	68	73	77	83	86	80	81	74	70	80	82	79	82	76	83	91	83	88	....	71.
	Minimum	24	26	27	33	46	47	52	55	56	50	51	40	39	44	45	49	55	57	58	54	53	59	64	61	62	60	57	60	63	58	....	50.
Cassville	Maximum	40	45	50	69	79	75	74	72	70	70	66	73	75	75	75	74	82	80	64	74	79	75	77	75	70	70	84	80	81	70	....	71.
	Minimum	24	27	23	20	48	....	35	35	53	53	40	33	41	43	39	38	41	43	54	51	54	60	63	64	55	59	60	60	54	51	....	45.
Duncan	Maximum	35	38	49	63	72	71	76	73	73	67	65	68	70	72	75	81	83	80	80	70	70	78	80	82	83	74	84	87	77	76	....	71.
	Minimum	21	31	24	32	50	50	48	54	54	53	45	42	42	42	41	48	52	54	52	54	51	59	5-	59	57	62	57	56	60	49	....	48.
Eldon	Maximum	41	46	56	71	75	80	81	80	76	71	64	61	71	76	78	82	82	83	84	80	74	83	86	81	85	79	86	90	82	76	....	75.
	Minimum	31	33	26	39	48	55	49	49	50	51	43	51	40	45	44	51	50	54	52	54	52	59	62	58	55	61	61	57	55	45	....	49.
Fruit City	Maximum	42	43	53	57	68	74	79	70	68	58	56	58	55	61	65	83	81	82	83	74	71	80	84	81	82	79	83	91	80	70	....	70.
	Minimum	33	36	43	48	53	52	56	62	56	49	48	48	49	51	56	59	56	64	64	51	53	63	72	62	62	60	62	70	62	53	....	55.
Gano	Maximum	39	43	53	65	76	81	81	75	79	69	66	65	70	74	77	82	82	82	85	76	72	82	87	84	84	79	89	91	77	80	....	71.
	Minimum	24	32	22	33	48	48	51	55	55	54	44	44	36	42	43	52	49	57	59	55	53	60	65	63	60	64	58	61	60	44	....	49.
Hollister	Maximum	44	74	60	72	82	78	78	80	76	74	72	76	78	78	80	88	84	84	82	62	68	82	80	82	84	76	88	90	86	82	....	77.
	Minimum	26	52	24	56	56	58	48	56	60	56	52	36	44	42	40	42	44	52	48	54	50	56	60	62	60	68	56	60	58	56	....	51.
Ironton §§	Maximum	41	45	54	64	78	80	81	78	77	70	67	66	64	70	74	84	80	82	85	80	73	83	85	83	85	85	87	91	80	80	....	75.
	Minimum	23	33	28	23	46	40	42	45	62	57	44	35	32	35	36	39	45	43	48	48	54	59	65	55	48	52	62	60	58	40	....	45.
Lebanon	Maximum	43	43	60	69	84	80	78	76	73	72	69	74	73	77	82	90	92	84	84	77	74	86	84	80	83	77	90	93	83	80	....	77.
	Minimum	25	27	27	36	48	50	52	55	57	53	51	48	42	43	45	49	52	53	57	56	52	53	59	60	59	63	59	57	57	60	....	50.
Mountain Grove	Maximum	41	45	53	65	77	76	76	72	74	69	58	70	67	72	77	80	82	81	80	67	71	78	80	72	80	73	84	89	89	78	....	72.
	Minimum	24	25	26	29	45	49	49	53	55	53	44	43	40	43	48	53	53	56	53	54	53	53	59	60	56	61	57	60	60	51	....	48.
Neosho	Maximum	46	45	56	71	78	76	76	75	71	69	68	72	79	77	78	83	84	80	78	69	77	81	80	77	79	78	84	87	85	80	....	74.
	Minimum	25	32	23	35	47	50	47	49	56	54	44	38	46	45	42	43	45	49	47	54	52	60	57	57	49	61	63	65	58	54	....	48.
Rolla	Maximum	29	45	51	66	77	80	80	75	76	68	64	62	70	75	79	81	84	80	83	77	70	81	85	82	83	75	87	90	75	78	....	73.
	Minimum	25	30	28	31	44	43	50	52	56	54	42	43	38	45	46	49	53	58	59	54	57	56	64	64	61	64	48	48	59	55	....	49.
Springfield	Maximum	41	40	50	67	73	72	73	72	70	66	62	67	69	73	76	80	81	78	77	65	70	78	78	76	79	74	82	84	75	76	....	70.
	Minimum	29	33	31	39	50	58	56	58	55	52	46	47	46	48	52	58	57	61	58	54	53	61	59	63	63	61	59	60	60	55	....	52.
Southwest Plain.																																	
Amoret	Maximum	48	49	57	73	79	76	78	77	72	72	69	67	79	79	79	85	85	81	80	74	76	75	80	78	80	78	86	86	84	72	....	75.1
	Minimum	27	33	24	39	48	51	54	53	53	50	42	42	41	48	50	46	48	51	51	55	55	55	58	52	56	58	60	55	54	49	....	48.
Clinton	Maximum	45	47	58	73	75	76	78	74	73	72	64	65	77	83	85	81	88	83	83	74	73	87	87	77	86	80	85	89	83	79	....	76.
	Minimum	28	25	35	35	40	45	51	56	55	54	55	48	44	45	45	49	59	54	51	56	43	60	60	59	57	58	58	60	55	46	....	49.
Harrisonville§§	Maximum	45	49	58	72	78	72	76	74	68	72	66	63	74	79	80	85	85	81	81	73	76	77	79	76	80	78	83	89	71	69	....	73.
	Minimum	25	28	23	25	42	45	53	54	50	52	45	40	42	45	50	50	50	51	52	57	56	57	60	60	60	60	60	60	54	50	....	48.
Lamar§§	Maximum	46	47	55	72	77	74	76	74	69	71	68	71	78	78	80	80	84	75	78	66	75	82	81	75	81	78	85	86	78	78	....	73.
	Minimum	28	30	25	33	41	45	53	53	55	52	44	42	44	49	48	49	50	52	50	57	56	57	51	60	57	62	62	66	59	55	....	49.
Lamonte	Maximum	49	50	55	56	79	76	75	76	70	72	71	66	71	75	80	84	86	83	83	76	73	77	76	75	81	79	82	89	80	79	....	74.1
	Minimum	27	26	33	36	31	42	51	52	54	36	39	39	41	47	48	49	47	49	49	44	53	63	57	56	59	62	61	59	48	45	....	46.
Marshall	Maximum	43	48	55	71	78	74	74	76	70	72	64	60	64	72	80	84	85	83	82	78	74	79	....	78	80	78	83	90	83	72	....	73.
	Minimum	33	32	25	37	45	49	50	52	52	54	40	40	42	45	49	49	51	52	53	54	54	59	....	52	60	60	59	54	53	47	....	[illegible]
Warrensburg	Maximum	42	46	56	71	78	74	77	78	68	71	65	61	72	78	82	85	87	82	83	77	76	82	82	78	84	79	85	90	80	71	....	74.
	Minimum	33	33	26	39	45	51	51	54	54	51	43	41	44	50	48	56	53	56	53	57	55	60	61	59	60	59	61	63	53	47	....	50.
Warsaw	Maximum	42	46	56	72	76	78	79	75	73	70	65	67	76	79	81	84	87	85	84	76	86	83	87	83	86	81	88	90	80	77	....	76.
	Minimum	25	35	22	33	50	45	50	56	57	55	45	38	45	49	43	43	46	53	48	53	55	63	63	59	59	63	64	60	58	44	....	49.
Northwest Plateau.																																	
Avalon	Maximum	40	46	55	69	77	71	75	72	70	71	68	63	60	73	80	83	85	83	84	80	72	78	80	76	83	77	81	90	85	73	....	73.
	Minimum	34	34	27	29	45	45	50	54	51	51	43	38	38	45	47	57	53	55	57	57	57	60	64	60	62	61	61	60	50	48	....	49
Grant City	Maximum	42	46	57	68	76	68	71	71	67	70	63	57	59	82	85	83	84	82	84	80	72	82	78	71	77	75	78	90	72	70	....	72.
	Minimum	32	32	26	39	44	36	40	52	52	48	41	32	43	44	47	54	52	54	50	50	53	58	61	57	59	57	56	59	48	50	....	47.
Kansas City	Maximum	43	45	55	73	76	70	73	71	65	69	63	58	72	76	79	84	83	78	80	72	71	76	76	70	77	76	80	86	71	67	....	71.
	Minimum	31	36	35	45	48	52	55	56	54	48	44	40	46	52	55	62	62	60	60	60	58	63	62	61	61	58	60	65	54	51	....	53.
Kidder§§	Maximum	40	45	55	67	75	66	72	73	67	70	63	57	60	76	79	83	84	81	82	77	73	77	78	71	78	75	77	86	71	70	....	70.
	Minimum	33	34	30	44	44	45	51	52	51	50	42	37	44	46	48	56	54	55	56	58	56	60	62	69	58	59	55	61	50	51	....	50.1
Lexington§§	Maximum	43	49	56	70	79	73	76	73	69	71	66	60	69	77	80	85	85	83	82	77	75	81	80	75	83	79	83	90	73	74	....	73.
	Minimum	34	32	28	40	46	50	52	53	53	52	43	41	43	45	46	54	50	53	53	58	55	61	62	60	60	60	61	61	53	46	....	50.
Maryville§§	Maximum	43	50	59	67	79	55	72	72	66	70	65	58	65	79	83	86	86	83	84	78	73	83	76	74	79	80	81	96	74	73	....	73.
	Minimum	25	30	27	32	42	42	44	49	51	45	49	32	33	43	48	51	52	53	48	49	52	55	59	58	55	58	55	55	43	47	....	46.1
Oregon	Maximum	42	46	55	69	73	69	71	68	66	69	65	59	67	75	78	82	81	83	79	74	71	78	72	70	74	77	76	85	76	69	....	70.
	Minimum	26	31	23	41	42	46	50	53	51	46	40	31	43	48	51	53	57	54	49	55	54	60	60	59	56	57	54	60	48	57	....	48.
St. Joseph	Maximum	42	47	56	73	76	63	74	70	67	71	64	60	69	79	82	84	84	81	82	77	75	80	75	70	78	76	80	90	74	73	....	72.
	Minimum	31	33	29	15	45	48	52	55	52	46	42	37	45	48	52	55	57	54	53	58	56	62	62	61	60	59	58	62	52	54	....	50.
Trenton	Maximum	41	45	52	67	72	70	70	71	68	80	68	62	58	68	77	78	78	78	78	79	74	80	78	77	79	77	77	88	84	70	....	71.
	Minimum	33	33	27	40	45	47	50	56	52	51	44	35	42	45	46	55	53	55	56	56	57	57	63	69	64	61	59	61	49	45	....	50.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged t the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MAY, 1915

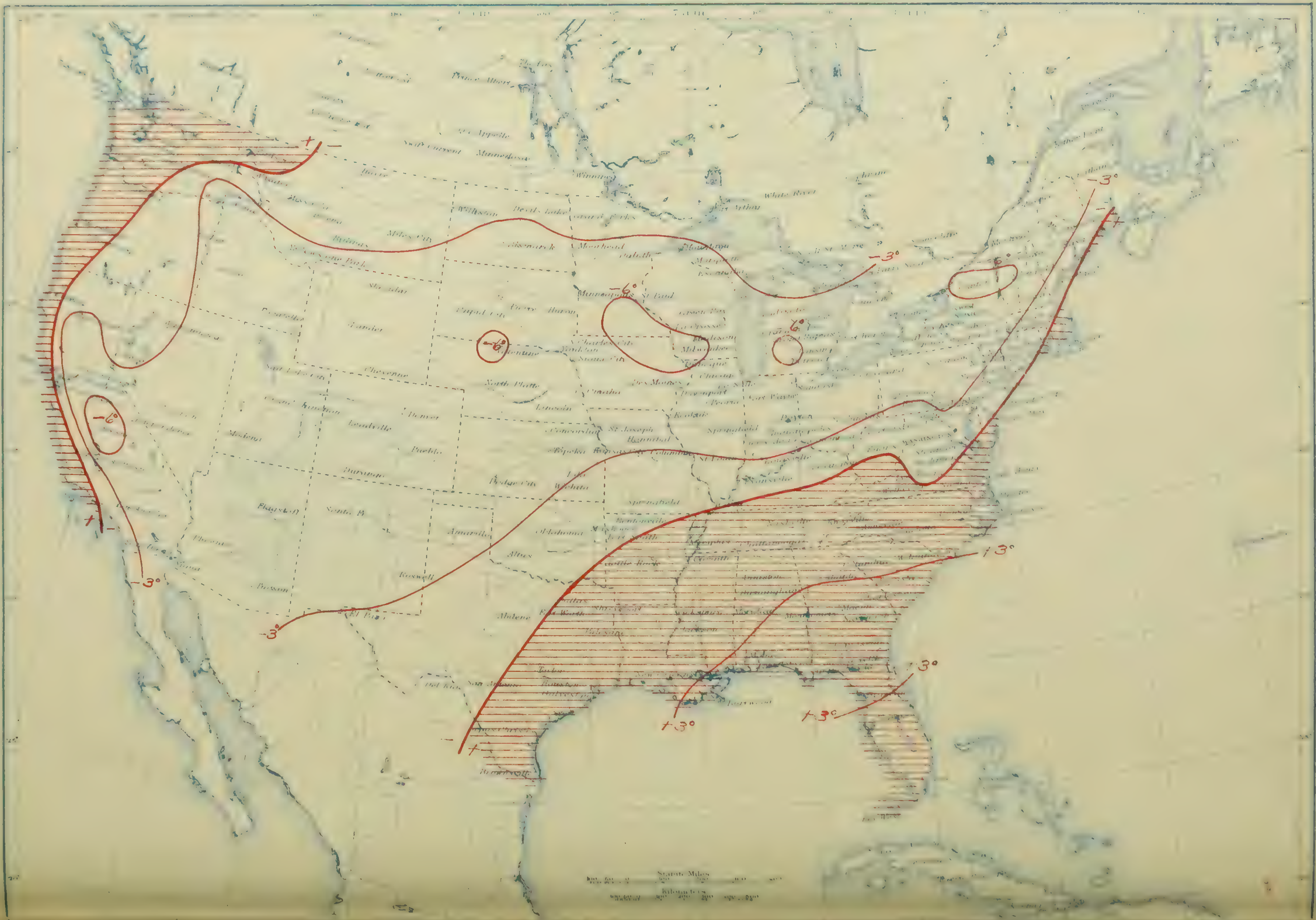
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JUNE 25, 1915

Departure of the Mean Temperature from the Normal, May, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

L. XIX. Columbia, Mo., May, 1915. No. 5

GENERAL SUMMARY.

Uniformly low temperatures for the season, much cloudiness, d excessive rains, which caused the Mississippi and Missouri vers, and most of their tributaries, to reach flood stages inunting thousands of acres of fine farm lands, were the principal atures of the weather during May, 1915.

Except the first two or three days, and from the 10th to the th, which were warm and favorable, the month was cooler an usual. The extreme temperatures, however, were well thin limits of previous years. During the coolest period, ich prevailed from about the 5th to the 9th, and again on 17th, minimum temperatures were below 40 generally; and ht frost occurred at a number of stations several mornings, t there was heavy frost at but one station, and only one tion reported a temperature of 32 or lower.

Local showers, and a few heavy rains, occurred during the t five or six days, which were followed by about a week of nparatively fair skies, which in turn gave way to an almost ntinuous rainy spell from about the 18th to the close of the nth. Over practically the entire State the monthly rainfall ceeded 6 inches, while over the western half amounts ranged m 8 to nearly 16 inches. It is the third wettest May in 48 rs. It also is of interest to note that more rain fell during s month than during the preceding 90 days or more; and ut 1.35 inches more than the combined totals of May, June, l July, 1914.

Severe thunderstorms, in some instances accompanied by h wind and hail, were frequent. The true tornado, however, was observed but once, on the 20th in Greene County, for account of which see Mr. Walter B. Hare's article on last ge.

PRESSURE.

The weather of the month was largely influenced by low ssure waves, consequently there was much cloudiness and quent rains. The mean sea-level pressure for the State, 8 tions reporting, was 29.85 inches, or .09 inch lower than rmal.

TEMPERATURE.

The monthly mean temperature, 65 stations reporting, was 7°. The mean departure from the normal for 53 stations ving 10 or more years' record was minus 1.4°. The mean perature and departure from normal for each division were follows: northeast plain, 62.1°, or 2.0° below normal; theast lowlands, 68.4°, or 0.9° above normal; Ozark plateau, 9°, or 0.8° below normal; southwest plain, 68.5°, or 1.6° ow normal, and northwest plateau, 61.3°, or 1.8° below rmal. The highest local monthly mean was 71.6 at Caruthville, and the lowest was 57.9° at Unionville. The highest perature recorded was 97°, at Steffenville on the 12th, and lowest was 30°, at Bethany on the 9th, the only station orting 32° or lower.

Temperatures of 90° or higher occurred on an average of but e days.

HUMIDITY.

As a rule the humidity was high, and on days when the perature exceeded 86° the weather was oppressive. The n relative humidity for the State averaged from about 3 to er cent above normal.

PRECIPITATION.

The average precipitation for the State, 78 stations reporting, 7.86 inches. The departure from the normal for 67 stations having 10 or more years' record was plus 3.04 inches, which is the largest excess in 17 years, and exceeded but twice in 48 years. The average precipitation and departure from normal for each division were as follows: northeast plain, 7.71 inches, excess 2.90 inches; southeast lowlands, 6.09 inches, excess 1.81 inches; Ozark plateau, 7.10 inches, excess 2.24 inches; southwest plain, 8.57 inches, excess 3.30 inches, and northwest plateau, 10.11 inches, excess 5.08 inches. The greatest local monthly amount was 15.98 inches, at Lexington, and the least was 3.04 inches, at Sikeston. The greatest amount in any 24 consecutive hours, was 7.10 inches at Avalon on the 26th and 27th. Excessive amounts of 2.50 inches or more within any 24-hour period, occurred at 10 or more stations.

The average number of days with 0.01 inch or more precipitation was 12, or about 3 above normal.

WIND.

The prevailing winds were from the southwest. Fresh to strong winds occurred locally on several dates, probably the most pronounced being an the 3rd, 20th and 26th.

SUNSHINE AND CLOUDINESS.

There was more cloudiness than usual in all parts of the State, the percentage of sunshine averaging from 10 to 13 below normal. The average number of clear days was 12, partly cloudy, 12, and cloudy, 7.

MISCELLANEOUS PHENOMENA.

Halos, lunar—22d, 23rd, 24th and 26th. Halos, solar—4th, 5th, 6th, 7th, 8th, 9th, 10th, 19th, 20th, 23rd and 30th.

Thunderstorms—2d, 8th, 9th, 18th, 19th, 20th, 21st, 23rd, 25th, 26th, 27th, 28th and 29th. (Some severe local storms from 19th to 26th.)

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.83	83	......	236	53	6,104	8.2	32	nw	25
Hannibal	29.84	80	......	....	....	7,322	9.2	36	sw	3
Kansas City	29.84	76	58	255	58	9,399	12.6	48	ne	26
St. Joseph	29.83	82	59	244	55	6,882	9.2	36	w	3
St. Louis	29.86	76	64	262	59	9,514	12.8	47	w	3
Springfield	29.85	81	65	271	62	7,248	9.7	48	nw	20
Cairo, Ill	29.86	81	65	....	....	6,539	8.8	36	n	25
Keokuk, Iowa	29.86	81	67	259	58	6,499	8.7	35	w	18

COMPARATIVE DATA FOR MAY.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	62.1	−2.3	93	30	5.35	+0.58	......	0	5	......	......	......
1889	63.5	−0.9	96	28	6.56	+1.79	......	0	5	......	......	......
1890	62.8	−1.6	96	32	3.47	−1.30	......	0	6	......	......	......
1891	61.5	−2.9	97	28	4.26	−0.51	......	0	8	......	......	......
1892	60.7	3.7	91	28	7.80	+3.03	3.90	0	17	5	9	17
1893	61.8	−2.6	94	30	5.89	+1.12	5.83	0	10	11	11	9
1894	63.7	0.7	95	22	3.99	−0.78	4.20	0	8	13	11	7
1895	64.6	+0.2	103	28	4.08	−0.69	3.43	0	9	13	12	6
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	0	12	12	12	7
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	0	7	16	11	4
1898	65.2	+0.8	97	31	7.90	+3.13	5.50	0	14	12	10	9
1899	66.9	+2.5	96	34	6.26	+1.49	5.28	0	12	10	13	8
1900	66.3	+1.9	97	29	3.69	−1.06	4.00	0	10	14	11	6
1901	63.8	−0.6	98	30	1.47	−3.30	3.04	0	6	15	10	6
1902	69.4	+5.0	98	39	5.03	+0.26	4.35	0	11	13	11	7
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	0	15	9	10	12
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	0	12	13	10	8
1905	64.9	+0.5	94	34	4.87	+0.10	4.55	0	10	12	11	8
1906	66.3	+1.9	98	27	2.16	−2.61	3.83	0	7	15	10	6
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	0	10	14	6	11
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	0	12	12	10	9
1909	63.3	−1.1	96	23	5.34	+0.57	5.26	0	9	15	9	7
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	0	13	11	8	12
1911	68.8	+4.4	101	27	1.55	−3.22	2.06	0	5	19	7	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	0	7	18	8	5
1913	65.8	+1.3	101	33	3.05	−1.93	2.95	0	8	16	7	8
1914	66.6	+2.0	98	31	1.47	−3.40	3.00	0	5	17	9	5
1915	63.7	−1.4	97	30	7.86	+3.04	7.10	0	12	12	7	12

Climatological data for May, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	8.29	+2.82	2.20	0	13	12	3	16	se	C. Randecker.
Brunswick	Chariton	652	36	61.2	− 1.5	92	13	41	5†	35	8.35	+3.38	1.81	0	14	9	2	20	s	Louis Benecke.
Columbia	Boone	784	26	62.6	− 1.9	90	13	39	9	32	6.32	+1.46	2.59	0	10	10	9	12	sw	U. S. Weather Bureau.
Fayette	Howard	725	31	....	.....	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	63.3	1.6	93	13	37	9	39	5.92	1.21	1.15	0	15	2	11	18	s	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	8.10	+3.61	3.56	0	13	9	6	16	se	J. W. Pulliam.
Hannibal	Marion	534	23	60.6	− 3.8	92	13	38	9	34	5.77	+0.77	1.41	0	14	13	4	14	sw	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	8.04	+3.73	2.14	0	15	11	4	16	e	C. T. Mausshund.
Jefferson City	Cole	628	30	63.6	− 1.5	91	13	40	5	37	5.83	1.44	1.50	0	14	16	1	14	w	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	7.21	....	1.25	0	10	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	62.3	− 1.6	93	13	37	9	40	8.41	+3.94	1.87	0	15	13	7	11	se	C. T. Farrell.
Macon	Macon	881	18	60.1	− 4.5	92	13	36	9	39	8.87	+4.99	2.19	0	11	11	8	12	sw	John A. Cook.
Mexico	Audrain	797	38	61.8	− 2.4	94	13	39	9	39	6.58	+1.79	1.36	0	13	13	2	16	sw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	64.2	− 1.8	92	13	42	5†	36	9.00	+3.60	1.69	0	14	8	8	15	w	E. L. Stevens.
Palmyra	Marion	652	4	60.6	.....	93	14	34	9	42	7.09	+2.44	1.59	0	11	12	7	12	sw	W. B. Markell.
St. Catherine	Linn	914	3	59.5	.....	91	13	36	9	33	9.11	......	1.60	0	15	9	13	9	s	L. D. Baker.
St. Charles	St. Charles	614	38	63.9	+ 2.5	93	13	41	9	35	8.52	+4.19	1.37	0	11	11	6	14	s	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	64.6	− 1.9	91	13	47	5	30	7.67	+3.43	2.15	0	15	14	7	10	e	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	64.2	.....	91	13†	46	5†	30	9.06	......	2.35	0	14	13	8	10	se	St. Louis University.
Steffenville	Lewis	576	23	62.8	− 1.6	97	12	35	9	43	6.04	+0.76	1.15	0	13	10	11	10	ne	Frank Hall.
Unionville	Putnam	1,072	23	57.9	− 4.9	92	13	35	9	41	9.18	+3.33	3.54	0	12	10	6	15	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	6.01	......	1.26	0	10	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	62.8	− 2.2	92	14	41	17	35	10.18	+5.27	2.68	0	14	8	8	15	s	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	5.45	+1.80	1.70	0	10	19	4	8	e	D. L. Albert
Cardwell	Dunklin	225	5	69.2	− 0.3	95	14	44	5†	36	5.14	....	1.38	0	11	20	7	4	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	71.6	+ 2.6	94	14	48	8	30	6.15	+2.03	2.60	0	10	16	9	6	sw	H. L. Averill.
Doniphan	Ripley	440	11	67.7ᵃ	+ 1.0	94	14	41	9	41	4.81	+1.04	2.00	0	9	14ᵃ	7ᵃ	9ᵃ	sw	W. W. Martin.
Jackson	Cape Girardeau	458	25	67.0	+ 1.6	96	13†	40	5	38	7.47	+3.19	2.60	0	12	7	9	15	n	L. M. Bean
Marble Hill	Bollinger	420	24	66.8	+ 0.9	94	13	40	6†	45	8.82	+4.44	3.46	0	11	9ᶜ	11ᶜ	8ᶜ	nw	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	6.92	+2.60	2.45	0	12	12	3	16	se	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	7.45	......	2.35	0	8	8	6	23	n	Christian Seabaugh
Poplar Bluff	Butler	333	12	67.2	− 1.6	95	14†	41	9	43	7.60	+2.61	2.20	0	12	14	2	15	......	M. S. Wiseheart.
Sikeston	Scott	328	15	69.5	+ 2.7	95	14	45	5†	37	3.04	−1.72	0.92	0	12	7	13	11	sw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	68.0	+ 0.5	92	14	48	5	31	4.13	+0.30	1.25	0	11	8	9	14	sw	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	6.61	+2.29	1.72	0	9	16	2	13	s	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	5.35	− 0.78	1.10	0	10	13	6	12	w	Mrs. Nellie V. Houser
Belle	Maries	1,000	24	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	A. J. Wofford.
Birchtree	Shannon	1,200	22	64.4ᵇ	− 0.9	92	14	39	5	33	6.18	+2.04	2.00	0	9	19	5	7	sw	V. H. Kirkendall.
Bolivar	Polk	1,020	28	64.6	− 1.1	91	13†	38	9	35	7.36	+1.55	2.48	0	10	17	7	7	sw	A. C. Fink.
Cassville‡‡	Barry	1,500	5	63.3	.....	89	12	33	8	39	5.74	......	1.17	0	7	16	9	6	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	64.6	.....	89	14†	39	17	33	6.66	.....	1.25	0	9	15	12	4	n	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	64.7ᵇ	− 1.4	89	13	36	9	41	10.81	+4.79	2.58	0	16	12ᵇ	3ᵇ	14ᵇ	sw	H. E. Dean.
Duncan	Webster	1,400	3	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	C. A. Mingus.
Eldon	Miller	934	15	68.9	.....	90	13	38	17	37	5.97	+1.29	1.70	0	13	11	14	6	sw	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	68.7	.....	93	13	49	7	23	7.16	......	2.05	0	9	17	6	8	se	R. C. Walton.
Gano ‡‡	Dent	1,250	12	64.8	− 1.1	94	14	39	9	42	7.64	+3.63	2.57	0	11	14	7	10	se	A. C. Leach.
Goodland	Iron	1,000	11	63.8	+ 0.4	94	14	33	9	45	6.97	+3.51	2.05	0	8	13	8	10	w	F. M. Adams.
Hollister	Taney	1,000	7	66.3	.....	94	14	38	9	38	6.30	+1.18	1.30	0	9	18	0	13	sw	W. P. Chapmann
Houston	Texas	1,280	23	64.4	− 2.6	91	13	38	9	41	5.36	+0.91	1.71	0	7	16	6	9	nw	R. F. Harmon.
Ironton	Iron	925	38	64.2	0.4	94	13	34	9	45	7.55	+2.62	2.00	0	11	7	14	10	n	W. H. Delano.
Koshkonong	Oregon	911	15	68.9	+ 2.0	93	14	44	5†	32	6.73	+2.30	2.43	0	13	12	6	13	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	65.4	− 0.4	92	13	39	9	40	6.21	+0.13	1.97	0	10	16	3	12	sw	O. L. Weissgerber.
Lockwood	Dade	1,088	21	63.1ᶜ	− 1.4	88	14	41	17	29	9.72	+5.21	3.21	0	9	14	5	12	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	63.6	− 0.8	91	13	37	9	42	4.48	+0.39	1.42	0	7	11	6	14	sw	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	66.0	0.1	89	13†	38	9	35	8.68	+2.96	2.55	0	11	16	7	8	sw	J. R. White & son.
Neosho	Newton	1,083	33	64.6	− 1.6	88	13†	37	9	37	9.62	+3.45	2.02	0	14	17	3	11	sw	W. O. Buck.
Rolla	Phelps	1,139	34	64.0	− 0.7	92	13†	39	9	40	7.25	+2.15	2.32	0	10	16	6	9	sw	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	63.2	− 1.4	86	14	42	17	30	6.52	+0.97	2.36	0	14	16	8	7	se	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	64.2	.....	92	12	38	9†	36	8.45	......	2.05	0	14	9	8	14	sw	Darby Fruit Farm.
Clinton	Henry	800	29	64.6	.....	94	25	40	5†	43	8.50	+2.84	2.15	0	8	13	10	8	sw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	63.0	− 0.8	97	15	37	9	40	7.89	+3.19	3.05	0	12	9	5	17	sw	A. J. Sharp.
Lamar	Barton	964	35	63.8	− 1.9	88	13†	40	9	39	6.72	+1.02	2.14	0	12	13	7	11	s	E. H. Adams.
Lamonte	Pettis	863	27	61.9	.....	91	14	35	8†	38	6.91	+1.46	1.75	0	11	12	10	9	sw	J. Ed. Hall.
Marshall	Saline	779	25	62.0	− 2.2	93	13	36	5	37	8.93	+3.93	2.95	0	12	16	7	8	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	....	.....	....	....	....	....	....	8.23	+2.55	1.95	0	10	17	5	9	sw	C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	W. E. Mathews.
Warrensburg	Johnson	883	37	64.4	− 1.0	93	13†	41	17	35	11.68	+6.78	6.85	0	12	11	11	9	sw	Geo. H. Collins.
Warsaw	Benton	883	11	63.9	− 2.2	91	13	38	9	34	9.53	+4.62	2.38	0	13	8	16	7	w	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	....	....	....	....	....	....	8.90	......	2.67	0	12	13	3	15	sw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	63.0	− 1.3	93	12†	40	9†	37	13.09	8.12	7.10	0	10	14	7	10	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	60.6	− 1.8	94	13	30	9	42	9.01	+3.88	2.15	0	11	9	11	11	nw	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	11.79	+4.95	3.90	0	12	13	1	17	......	Hocey O. Dupy
Conception	Nodaway	982	31	60.4	− 0.7	92	13†	38	17†	32	7.54	+3.01	1.41	0	12	8	12	11	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	60.6	− 1.6	97	13	38	9†	35	7.08	+2.10	1.48	0	10	15	3	13	nw	W. H. Campbell.
Kansas City	Jackson	963	27	62.4	− 2.1	90	13	39	18	27	11.00	+5.89	3.25	0	12	10	11	10	s	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	61.1	− 1.6	91	13†	38	17	31	10.48	+4.60	2.75	0	12	13	7	11	se	J. F. Sharp.
Lexington	Lafayette	813	31	62.6	− 1.4	93	13	38	9	34	15.98	+10.93	5.90	0	10	14	2	15	s	J. W. Keithley.
Liberty	Clay	864	27	63.2ᵃ	0.8	94	12†	39	9†	38	11.55	+6.09	3.23	0	10	11	10	10	sw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	60.0	− 2.4	96	13†	36	9	42	7.89	+2.59	1.42	0	15	13	1	17	e	J. R. Brink.
Oregon	Holt	1,113	60	59.8	3.5	90	11	37	17	30	8.88	+4.04	2.88	0	11	12	10	9	nw	Tom Curry.
St. Joseph	Buchanan	967	44	61.6	.....	93	11	37	9	36	8.28	+3.91	2.68	0	14	12	10	9	nw	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	59.8	.....	94	11	33	9	40	7.98	...	1.47	0	13	15	7	9	sw	John F. Frazier.
Trenton	Grundy	812	21	61.6	2.4	90	13†	37	9	41	10.96	+5.89	2.43	0	12	12	6	13	s	W. H. Estes.
State means and extremes		....	...	63.7	1.4	97	12†	30	9	45	7.86	+3.04	7.10	0	12	12	7	12	sw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports ar used in determining section or division means.

Reference letters, ᵃ ᵇ ᶜ, appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D No. 1; of Sublett, Kirksville, R.F.D. Sublett.

Daily precipitation for May, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ville	Missouri	.04		.60			.04	.32											.17	.68	.58	.64			.83		2.20	1.68	.45	.06			8.29
swick	Grand	.03		.19	.02		.05	.11											.08	1.50	1.30	.85			.86		.35	1.81	1.12	.08	T.		8.35
mbia**	Missouri	T.	.66				.67	T.	T.									.05	.66	.42	.87			.36		T.	2.38	.22	.03	T.	T.		6.32
tte	do																																
n	do	.04	.27	.04			.80	.04											.70	.10	.40	1.15		.15		.07	1.07	.97	.11		.01		5.92
	Mississippi		.21		.01		.02	.14							.10					1.22	1.28			.06		.83	3.56	.50	.14	.03	T.		8.10
bal**	do	.07	1.13	.01	.01	T.	.20	.01	T.					T.					.40	.69	1.10			.18		.91	.66	.33	.07	T.	T.		5.77
mann	Missouri	.02		.68			.23	.52											.25	.32	1.28	.81	.17	.01	.87		.48	2.14	.04	.22	T.		8.04
son City ‖	do	.27		.65			.10	.98											.23	.15	.42	1.12	.08	.05	.15			1.50	.03	.10			5.83
sville	Chariton	.61	.17				.08												1.00	1.25	1.02			.65		.27	1.00		1.16				7.21
siana	Mississippi	.24	.10	.21	T.		.31	.07											1.05	.15	.40	1.08	.10	1.87		.94	.50	.55	.29	.55			8.41
n	Chariton	.21		.56			.03	T.											T.	.69	.90	.73			1.59	T.	2.19	.82	.99	.16	T.		8.87
o	Mississippi	.10	.02	.92			.10	.47		T.									.05	.50	.48	1.04			.69		1.36	.80		.05			6.58
eld	Meramec	.07	.88				1.69											T.	.28	.44	1.65	.88	.16	.56		.17	.77	1.12	.19	.14			9.00
yra	Mississippi	.08	.73					.21												.65	1.13	1.08			.30	.67	1.59	.62	.03				7.09
t'erine	Grand	.09	.68				.07	.06											.56	1.60	1.10	.11		.56		1.37	1.35	.18	1.31	.03	.04		9.11
arles	Missouri		.65	1.17			1.37												.48		1.23	.75		.60		.62	.85	.57	.23				8.52
is (1)***	Mississippi	.07	.40			.01	.74									T.		T.	.33	2.14	.74	.21	.19	.50	T.	.46	.54	.89	.42	.03		T.	7.67
as (2)	do	.06	1.14				.71											T.	.38	2.35	.62	.26	.12	.67		.39	.93	.95	.47	.01		T.	9.06
ville	do	.15	.25	T.	T.		.08												.35	1.00	.15	.88		.26		1.10	1.15	.45	.15	.07			6.04
ville	Grand	.16		.24	T.	T.	T.	.50							T.					.30	2.34	.50	T.		.20		2.50	1.04	.70	.50	.10		9.18
alia	Mississippi			1.12				.35	.12										.75	.55	1.26			1.10		.36		.28	.12				6.01
enton ‖	do	.01		1.86			.16	.50											.12	.53	1.30	1.00	.12		.58		.79	2.68	.11	.42	T.		10.18
heast Lowlands.																																	
Girardeau	Mississippi	.05					T.	.90													1.10	.30	.20	.20	.40			1.70	.10	.50			5.45
ell	do	.05		.34			.40	1.25									.08		T.		1.20	.12	1.38	.12	T.			.15	.05				5.14
ersville	do	T.	T.	.30			.37	2.60				T.	.27				T.		T.		.22	T.	1.85	T.	T.	T.		.26	.20	.04	.04		6.15
an	Black	.18	.08				.93										T.		T.	T.	2.00	.12	.49		.15			.73	.13				4.81
on	Mississippi	.14	.02				1.54										.11		.05	1.55	.22			1.02			2.60	.05	.11	.06			7.47
Hill	do	.07	.05				.90	.45													1.51	.24	.64	1.10				3.46	.30	.10			8.82
Madrid ‖	do			.02	.10		.26	2.45					.14								.30	.55	1.20		1.28			.45	.02	.15			6.92
(near)	do						.51	1.25												1.75	.34		.30	.75			.20	2.35					7.45
Bluff	Black	.04	.12	T.			.19	1.00										.05			2.20	.23	1.25		.34			2.00	.07	.11			7.60
son	Mississippi		.09	.02			.35	.50									.06				.92	.08	.39	.30				.25	.02		.06		3.04
Ill**	do		.02	T.			.82		T.			T.	.05				.13		T.	.20	.35	.43	.27	1.25	T.	T.		.25	.36		T.		4.13
k Plateau.																																	
gton ‖	Gasconade	.05					.40	.85											.06	.08	1.72	.98		1.10				1.37					6.61
ll	Osage	.18					.27	1.05													.67	1.10	.34	.30	.12			1.10	.22				5.35
	Meramec																																
tree	Black			.07			.62													.26	1.46	.96		.26			.22	2.00	.33				6.18
ar	Osage	.40					2.48												.01	.73	.92	.05		.35	.35			1.90	.17				7.36
lle	White	T.				.07	1.11												.65		T.	1.04					.75	1.17	.95		T.		5.74
er	Gasconade		T.				1.80	.05										T.		.93	1.25	.83	.67	.08		.22	.83		T.				6.66
	Neosho	T.	.14	.01		1.70		.05			.04								.07	1.37	2.53	.02	.58	.68	.32		.19	2.58	.43			.10	10.81
m	Osage																																
	do	.03	.10				1.20												.08	.45	.25	.75	.10	.40	.03	T.	1.70	.60	.28				5.97
City	Black		.12				.70	.10													2.05	.70		.65			.64	1.77	.43				7.16
	Meramec						.75	.02												.35	1.90	.99	.29	.64	T.		.10	2.23	.34	.03			7.64
and	Black						.14	.51												2.05	.71						1.08	1.90	.45	.13			6.97
ter	White						.85												.85	.85	.15	1.25	.25	.30	.50			1.30					6.30
on	Gasconade						.40													1.20	.17	1.33	T.	.26	T.		.29	1.71	T.	T.			5.36
n	Mississippi	.02		.20			.03	.70									T.	T.	T.	T.	2.00	.60	T.	.75	.80	T.	T.	1.80	.20	.45	T.		7.55
onong	Black	.04	.02				.98	.03									.02		T.	.04	2.43	.48	.66	.31	.09			1.30	.38			T.	6.73
on ‖	Osage	.17					.52	1.35												.06	1.97	1.25		.03				.78	.06			.02	6.21
ood	do		.86				3.21				.75									1.23	.42	.10		.42				1.65	1.08	T.			9.72
tain Grove ‖	White	.32					.08	1.03													1.42	1.35	T.	T.	.22	.06							4.48
t Vernon	Neosho					.07	1.76				.07									1.32	2.55	.02		.57	.43		.38	1.40				.11	8.68
o	do	T.	.29			.06	1.98				T.	.27							.10	.66	1.33	.46		.92	.89		.10	2.02	.51		T.	.03	9.62
	Meramec	T.					.57	.67												.14	1.28	1.10		1.04	.03			2.32		.05		.05	7.25
gfield**	White	.01				.04	1.49	.02			T.								.02	1.36	1.84	.05		.37	.30		.40	.56	.05	T.	.01	T.	6.52
tland	Osage																																
west Plain.																																	
t	Osage	.32	.02			T.	.77	.20									T.		.10	1.63	.60	.45		.40			2.05	1.52	.37	.01	.01		8.45
n	do	.10					1.30													1.40	1.10		.40				2.15	1.65	.40				8.50
sonville	do	.12	T.	.35			.12	.34											.10	1.25	.88	.65			.48			3.05	.49	.06			7.89
r	Neosho	.46		.12			.28	1.51										T.	T.	.07	.62	.44	T.	.08	.42	.07		2.14	.51	T.			6.72
ate	Missouri		.40			T.	.40	.05										T.	.43	.85	.80	T.		.80			1.75	1.00	.38		.05		6.91
all	do		.12				.15	.03											1.00	1.03	.50	.50		.51			2.95	1.40	.70	T.	.04		8.93
ta	Osage					.25	1.30	.05											.08	1.10	1.15				.30		1.95	1.15	.90				8.23
la	do																																
nsburg	Missouri	.03	.49				.45	.09											.53	1.16	.65	.27		.36			4.37	2.48	.80	T.	T.	T.	11.68
w	Osage	1.20				T.	1.52	.08										T.	.12	.38	.92	.12		.28			2.38	1.52	.92	.05	T.	.04	9.53
rly	Missouri	.08		.42				.28											.08	1.14	1.25	.81			.55		.64	2.67	.96	.02			8.90
hwest Plateau.																																	
	Grand		.07				.30												.60	2.30	1.45			.87		.25	3.65	3.45		.15			13.09
y	do	.10					.36												T.	2.15	.40	.22		.30		.90	1.77	1.10	1.70	.01			9.01
othe	do	.15		.16			.03	.24											.09	1.30	1.12	.78			.48		.84	2.70	3.90				11.79
gton	Missouri	.10	T.				.30		T.										.38	1.28	.50	.24		.25		1.44	1.44	1.12	.43	.06			7.54
ity	Grand		T.				.58	T.	T.										T.	1.48	.37	.10		.10		.83	1.48	.76	1.34	.04	T.		7.08
City**	Missouri						.56	.06										.04	1.28	2.35	.68			.74			2.84	2.16	.26	.01	.02		11.00
r	Grand	.08					T.	.18											.08	1.40	1.33	.50			.58		1.26	2.75	2.20	.10	.02		10.48
gton	Missouri						.07	.22											.12	1.72	.91	.87			1.44		.03	5.90	4.70		T.		15.98
	do	.06					.39	.04										T.	1.10	2.21	1.00			.77	T.	T.	2.10	3.23	.65	T.			11.55
ile	do	.25		.08			.05	.31	.01											1.04	.65	.33			.18	1.04	1.22	1.18	1.42	.12	.01		7.89
	do		.06				.45													2.05	.05	.37		.30	T.	1.15	**	**	4.37		.08		8.88
eph***	Missouri	.06		.27			.14	.10											.09	1.46	.86	.24			.83	T.	.91	2.19	1.13	T.	.05		8.33
	do	.33	.21				.37												.28	.91	.17	.84				1.47	1.41	.80	1.11	.07	.01		7.98
on	Grand		.28				.32											.04	1.24	1.37	.43			.44		2.43	2.41	1.78	.19	.03			10.96

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
f observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

** Regular Weather Bureau station; precipitation is for 24 period, midnight to midnight.

*Precipitation in the next following measurement.

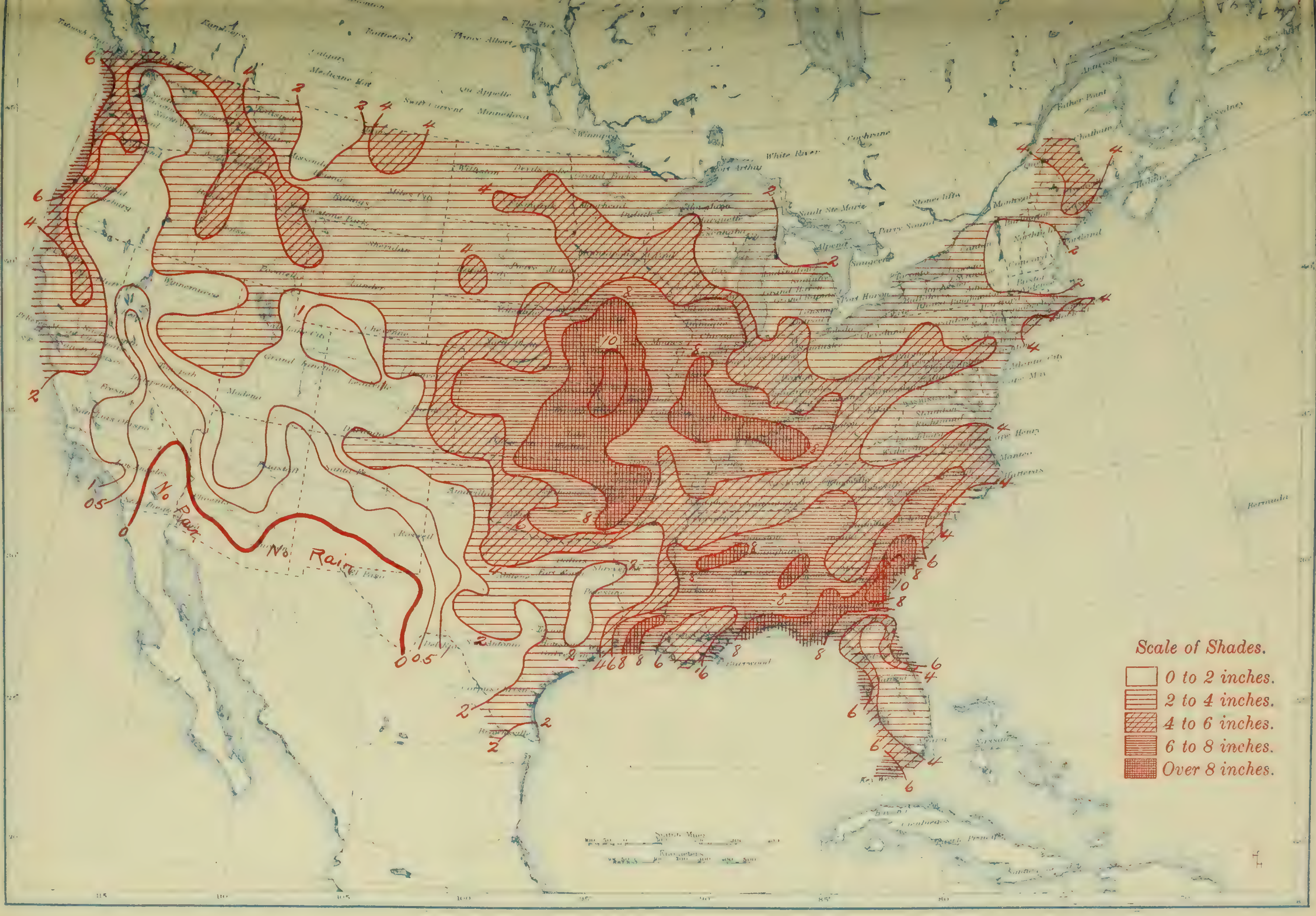
Separate dates of fall not recorded.

Daily temperatures for May, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	75	81	77	57	70	59	69	63	70	80	84	89	92	90	87	71	67	51	60	62	65	72	72	79	85	68	72	68	57	69	73
	Minimum	51	53	51	45	41	42	44	44	38	45	57	54	60	64	64	52	40	41	42	50	56	47	48	55	57	64	57	56	52	52	55
Columbia	Maximum	75	84	79	56	69	58	65	62	68	80	83	87	90	90	87	75	64	52	58	63	68	73	73	79	85	76	76	73	57	62	71
	Minimum	55	58	54	45	40	47	44	43	39	51	57	55	61	65	66	48	42	47	45	58	52	57	58	56	65	61	56	54	52	59	56
Fayette	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum	66	68	79	58	68	59	66	60	67	76	81	90	92	87	87	71	64	56	52	68	66	72	74	79	77	70	64	72	57	61	73
	Minimum	47	55	54	48	43	48	44	45	38	41	55	56	58	63	59	48	43	42	41	52	54	47	53	56	61	55	46	57	54	55	53
Jefferson City §§	Maximum	79	83	81	61	71	59	66	65	70	79	81	87	91	90	89	79	67	55	63	69	73	74	72	81	86	73	78	73	69	65	70
	Minimum	54	56	60	46	40	49	44	45	42	42	53	53	60	62	63	57	43	49	49	52	53	55	58	58	61	68	58	59	51	52	56
Macon	Maximum	78	76	76	57	69	60	67	59	68	80	83	89	92	90	86	70	65	53	58	62	63	73	71	80	81	67	66	76	56	58	73
	Minimum	50	51	53	46	41	45	42	45	36	42	50	50	59	62	68	54	39	42	40	41	50	45	51	55	60	60	49	50	52	52	51
Mexico §§	Maximum	73	78	85	58	72	58	66	66	71	80	84	90	94	92	89	79	68	52	61	65	71	73	72	82	81	74	72	76	59	65	72
	Minimum	48	52	55	45	42	46	43	43	39	43	45	52	57	61	63	54	41	43	41	43	51	52	56	55	57	62	51	52	52	54	54
Oakfield	Maximum	73	81	83	66	70	62	65	65	68	76	77	85	92	91	90	83	65	58	61	82	77	73	73	77	84	74	73	72	64	69	72
	Minimum	53	57	60	47	42	51	46	48	42	48	53	49	62	66	67	58	42	48	48	54	59	54	59	58	64	63	56	64	52	54	56
St. Catharine	Maximum	68	72	74	58	67	67	67	63	66	77	80	85	91	87	85	71	63	58	48	57	61	69	69	76	78	76	60	67	57	58	70
	Minimum	50	54	49	47	42	49	41	47	36	49	53	54	58	61	63	51	37	43	37	47	50	46	53	51	60	56	49	56	51	52	52
St. Louis (1)	Maximum	71	80	84	60	68	65	65	66	67	74	74	84	91	88	90	80	63	58	60	79	77	73	71	77	84	74	69	74	59	68	73
	Minimum	54	58	60	51	47	54	50	53	48	51	56	59	68	73	71	50	47	50	47	54	61	56	61	60	63	59	55	58	55	56	57
Unionville§§	Maximum	74	72	70	58	70	56	66	56	64	79	82	90	92	90	84	58	64	55	50	60	62	72	74	80	82	64	60	70	60	62	70
	Minimum	43	46	50	44	45	47	40	42	35	38	46	54	60	62	58	53	36	37	36	40	46	41	46	50	54	58	46	50	51	48	40
Warrenton §§	Maximum	75	81	80	58	70	61	65	64	69	82	80	88	78	92	89	79	67	54	62	75	74	74	75	82	83	72	69	72	57	68	71
	Minimum	53	52	59	46	43	48	45	45	42	47	52	55	57	67	62	58	41	48	44	46	58	54	56	58	62	62	53	57	52	54	55
Southeast Lowlands.																																
Cardwell	Maximum	87	86	88	74	75	75	73	76	72	75	70	80	90	95	90	93	70	67	81	84	85	84	88	84	86	90	84	77	74	75	78
	Minimum	57	60	67	54	44	56	58	44	48	45	50	58	54	62	60	62	62	52	56	65	67	65	62	67	64	62	62	60	55	55	54
Caruthersville	Maximum	87	85	87	77	77	73	73	74	75	79	72	81	92	94	91	91	83	70	81	86	86	83	86	84	90	92	84	78	85	75	79
	Minimum	59	65	62	55	55	57	60	48	52	50	58	61	62	65	65	67	53	55	57	68	72	65	67	64	69	62	66	67	55	59	59
Doniphan	Maximum	85	81	88	81	74	70	68	76	74	76	70	85	93	94	91	91	76	68	77	80	86	83	....	83	89	90	80	76	70	72	74
	Minimum	56	60	59	53	43	54	54	42	41	43	46	51	52	59	56	60	50	49	55	61	62	65	....	65	59	70	63	65	55	54	59
Jackson	Maximum	84	80	89	82	76	70	78	78	71	77	74	85	96	96	92	71	62	70	76	86	76	75	82	90	85	83	76	63	62	68	75
	Minimum	56	60	65	54	40	57	46	46	43	47	48	57	58	64	63	50	47	47	59	61	62	61	59	62	62	63	63	54	56	56	59
Marble Hill	Maximum	82	80	90	81	75	65	65	75	85	75	70	85	94	93	91	90	76	68	72	76	84	75	72	83	85	88	89	75	64	75	74
	Minimum	55	55	64	54	45	40	55	49	40	40	40	45	52	61	59	62	47	45	51	64	60	60	62	63	69	69	66	60	54	55	58
Poplar Bluff	Maximum	80	81	86	88	74	74	72	70	72	74	78	75	84	95	95	92	92	69	70	77	86	84	88	81	83	91	90	80	75	60	75
	Minimum	49	62	55	51	42	44	55	43	41	45	48	50	53	58	60	60	49	49	53	55	60	64	67	58	61	62	63	63	55	52	55
Ozark Plateau.																																
Birchtree	Maximum	84	79	85	73	70	63	63	73	73	77	74	80	87	92	89	89	65	62	71	74	81	80	83	....	....	85	75	67	64	66	70
	Minimum	53	59	60	49	39	49	50	43	39	46	49	48	58	61	59	56	44	47	50	59	56	63	64	....	....	58	60	61	49	51	58
Cassville	Maximum	70	80	70	67	67	66	62	70	80	82	84	89	86	87	88	86	86	86	64	75	69	78	80	85	81	80	78	70	67	64	71
	Minimum	54	51	53	45	40	40	40	33	53	45	46	50	50	54	50	49	54	54	43	48	50	50	58	63	63	67	55	50	49	50	50
Duncan	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	82	84	82	65	71	69	64	65	76	80	84	88	90	89	88	82	68	62	71	68	75	77	76	80	88	82	80	75	59	65	72
	Minimum	51	55	56	44	39	51	43	46	41	45	52	51	64	60	61	54	38	49	49	56	50	54	56	56	62	61	61	45	49	54	54
Fruit City	Maximum	82	80	85	70	75	68	68	77	71	76	72	84	93	92	91	89	70	67	70	73	82	72	76	75	86	84	73	69	63	70	68
	Minimum	65	64	65	54	59	50	49	61	56	61	58	66	72	73	72	66	51	52	50	60	69	65	58	65	71	63	64	62	52	56	58
Gano	Maximum	88	82	85	70	69	64	64	68	71	80	78	85	93	94	91	86	68	63	71	78	81	79	80	78	87	84	78	71	58	63	70
	Minimum	51	59	60	46	40	52	45	45	39	45	48	43	59	61	65	57	40	45	46	57	67	56	60	55	63	65	60	54	50	52	53
Hollister	Maximum	88	84	76	62	74	66	66	72	74	78	82	84	90	94	90	92	70	72	76	76	80	74	86	82	84	86	78	76	68	64	70
	Minimum	54	60	56	48	42	52	54	40	38	42	44	48	52	62	66	64	48	52	54	56	54	56	62	58	60	72	70	68	50	52	56
Ironton §§	Maximum	82	80	87	68	73	65	65	73	72	77	74	86	94	93	91	89	68	66	70	76	83	76	73	78	87	87	78	71	61	70	70
	Minimum	50	50	48	50	36	55	54	40	34	37	43	42	49	56	56	53	43	42	50	58	59	62	60	53	58	67	61	64	52	55	55
Lebanon	Maximum	87	85	80	69	74	58	65	70	78	78	86	89	92	91	89	88	71	64	69	76	78	80	83	84	91	82	82	68	59	65	75
	Minimum	52	60	57	44	40	46	44	44	39	49	53	52	52	62	65	62	45	51	52	54	52	52	60	60	66	68	60	61	49	49	56
Mountain Grove	Maximum	86	78	79	64	68	62	62	71	72	78	77	90	91	90	87	86	65	66	67	63	80	76	78	74	84	85	72	72	57	63	70
	Minimum	55	60	60	45	38	49	49	44	37	46	53	48	57	62	61	54	45	46	51	52	52	56	56	55	59	64	59	60	48	50	55
Neosho	Maximum	84	82	77	75	67	61	64	66	74	80	80	85	88	88	87	86	67	73	73	70	77	80	80	84	87	85	80	75	63	63	72
	Minimum	58	58	57	46	43	53	44	46	37	49	49	48	54	56	63	53	44	50	58	53	48	48	59	56	67	69	55	52	50	54	58
Rolla	Maximum	85	83	82	63	71	61	64	66	71	80	81	86	92	92	89	82	69	58	69	78	79	79	80	76	88	78	78	74	58	64	71
	Minimum	49	56	59	45	42	48	41	44	39	46	48	50	52	63	63	55	44	44	50	51	56	57	58	55	60	68	62	63	50	50	54
Springfield	Maximum	81	79	76	62	64	57	60	62	69	77	78	81	86	86	84	81	62	64	64	69	73	78	78	76	85	81	74	63	55	61	68
	Minimum	56	63	55	45	45	52	43	46	45	54	55	58	65	64	65	51	42	52	54	57	49	56	59	59	66	60	59	49	49	53	57
Southwest Plain.																																
Amoret	Maximum	85	80	81	70	72	62	67	68	71	82	83	92	91	91	91	90	67	65	60	65	73	79	78	84	87	86	81	66	62	63	72
	Minimum	52	58	51	42	40	47	41	46	38	53	54	56	62	61	69	60	38	46	46	52	44	52	56	57	67	61	57	51	49	54	54
Clinton	Maximum	90	86	80	70	73	61	68	66	73	82	85	90	91	90	90	87	70	62	61	64	74	80	75	84	93	81	80	72	60	65	74
	Minimum	47	47	47	44	40	52	55	52	40	50	70	53	60	62	60	52	40	47	48	55	45	55	57	56	61	60	59	53	50	55	55
Harrisonville§§	Maximum	81	81	75	61	71	57	67	64	72	83	84	90	93	92	97	74	66	56	63	56	69	74	74	82	88	79	77	69	58	62	69
	Minimum	52	55	57	43	40	43	50	50	37	43	55	54	60	63	65	51	46	46	44	48	46	48	55	55	60	70	62	61	52	52	55
Lamar§§	Maximum	85	81	77	66	66	64	66	66	73	80	83	87	88	88	85	80	67	64	68	67	74	79	78	85	88	78	78	55	59	64	74
	Minimum	58	58	57	44	42	49	43	47	40	44	44	54	60	61	65	55	41	49	55	57	45	51	59	59	62	72	57	54	49	50	57
Lamonte	Maximum	82	78	76	62	70	59	65	64	73	80	83	89	90	91	90	75	65	60	58	63	67	76	73	80	81	81	76	67	58	62	71
	Minimum	47	52	55	36	37	51	43	35	35	52	53	52	56	62	63	47	40	40	48	53	55	57	53	63	61	57	55	54	51	54	55
Marshall	Maximum	82	80	79	68	71	62	68	63	70	81	84	89	93	91	89	78	68	60	55	60	62	73	73	79	87	83	75	72	60	61	72
	Minimum	58	60	51	43	36	52	43	47	39	47	52	52	59	58	60	48	41	43	43	51	50	47	54	54	62	58	58	56	59	55	55
Warrensburg	Maximum	84	83	77	67	74	63	63	66	74	85	86	92	93	93	90	82	66	60	58	62	72	76	76	85	89	84	81	74	58	66	71
	Minimum	53	58	56	43	44	51	42	47	42	52	56	57	64	65	64	57	41	42	45	53	47	52	55	58	65	60	60	54	50	57	55
Warsaw	Maximum	84	85	79	70	71	65	66	64	72	82	83	87	91	90	89	81	68	64	66	64	72	79	77	81	90	82	81	76	60	65	70
	Minimum	52	55	52	45	35	53	44	50	38	48	49	50	57	58	59	50	39	43	50	59	49	54	57	55	67	63	60	55	51	55	56
Northwest Plateau.																																
Avalon	Maximum	75	82	78	63	73	66	70	64	74	82	84	93	93	92	88	79	70	63	50	55	67	75	73	81	84	82	67	67	59	57	72
	Minimum	53	55	52	45	45	53	43	49	40	50	55	56	65	65	66	55	40	44	42	49	54	47	55	56	63	58	53	58	52	53	55
Grant City	Maximum	70	79	77	58	72	56	70	65	72	85	87	92	97	96	85	71	67	58	58	55	63	75	75	82	83	77	59	58	58	56	71
	Minimum	52	55	46	44	43	44	41	43	38	51	54	58	62	61	65	51	38	40	38	45	49	45	52	51	61	57	47	50	50	51	48
Kansas City	Maximum	80	80	73	61	68	57	66	63	69	81	82	90	90	90	85	69	64	54	55	56	68	72	74	79	86	76	73	62	57	58	68
	Minimum	55	63	51	44	49	45	43	50	47	56	60	63	69	68	69	48	44	39	43	49	45	52	55	60	69	60	55	50	49	54	54
Kidder§§	Maximum	72	78	75	58	69	74	68	62	70	80	82	89	91	91	86	63	64	48	51	56	62	72	73	79	82	64	62	67	67	58	69
	Minimum	52	52	54	44	44	52	43	46	39	51	58	62	65	65	68	55	38	43	40	48	48	50	55	57	67	63	52	61	50	52	52
Lexington	Maximum	78	82	79	60	72	58	69	65	72	83	85	90	93	92	89	75	67	51	55	54	66	73	73	80	80	66	72	65	56	61	72
	Minimum	54	58	48	44	41	52	43	50	38	52	56	59	65	65	66	53	41	50	41	50	48	46	55	55	60	65	58	59	51	55	55
Maryville§§	Maximum	73	79	74	62	72	52	71	64	75	85	87	94	96	96	88	64	67	53	58	54	66	77	77	84	88	78	57	65	58	61	73
	Minimum	51	52	44	40	41	45	40	41	36	45	45	57	60	60	67	52	37	39	38	37	47	44	50	52	57	60	47	48	48	48	48
Oregon	Maximum	74	76	71	59	68	61	67	60	68	79	80	86	88	90	82	73	62	56	46	53	61	71	72	79	83	81	61	54	54	58	67
	Minimum	52	58	59	41	40	41	41	43	38	52	60	67	64	66	67	52	37	40	38	45	46	46	53	57	60	57	48	51	47	50	53
St. Joseph	Maximum	78	79	73	61	69	56	68	63	73	83	84	91	92	93	85	66	63	55	49	57	65	75	75	81	88	76	63	61	56	59	72
	Minimum	55	59	50	44	45	44	44	46	37	55	60	61	66	69	66	48	42	42	42	48	48	47	55	59	62	58	51	51	49	53	35
Trenton	Maximum	70	74	73	67	69	68	68	67	78	79	81	85	90	90	88	81	65	64	48	57	66	70	73	79	80	79	60	71	62	59	70
	Minimum	52	55	49	46	46	49	43	46	37	50	57	59	62	67	67	54	38	43	40	46	50	47	52	53	60	58	50	55	51	52	54

[illegible] etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charg the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
Statute Miles
Kilometers

TORNADO AT SPRINGFIELD, MO.

By W. B. HARE, OBSERVER.

Carrying with it considerable destruction of property, but entailing no serious injuries either to persons or live stock, a gale which for a quarter of a mile attained tornado intensity, passed over the southeast part of Springfield at about 6.25 p.m., May 20, 1915. The worst damage by the storm was in the vicinity of the Welsh Packing Plant and the model farm of W. B. Sanford, president of the Holland Banking Company, one mile east of the city limits.

The tornado came from the southwest, the first evidence was noted at about 6.23 p. m., when clouds of a dark greenish hue seemed to be rushing from all directions to a common center about a quarter of a mile from a grove of trees (due southwest), this grove of trees being a little over one mile from the largest barn on the Sanford farm. This barn was directly in the path of the storm about two minutes later. Heavy rain was falling during the passage of the tornado, heavy thunder was heard and lightning flashes were noted almost incessantly. Several seconds after the storm was first noted, a long, pencil-like cloud seemed to extend almost to the earth with winds whirling all around it. This cloud began to move rather slowly toward the northeast. The wind increased in violence, a terrific roaring sound was heard, and the first serious damage was done at the home of Max Claussen, engineer of the packing plant, whose new four room cottage was lifted from its foundations and twisted badly out of shape. Mr. Claussen's right leg was cut by a piece of flying glass and Mrs. Claussen received a severe bruise above the left eye when she was thrown against the wall of the rocking building.

The storm passed across a field, still moving toward the northeast, to the plant of the packing company where half a doz buildings were either blown down or shifted from their form locations. A shed in which large quantities of lard cans ha just been stored, was revolved around, but not demolishe The machinery room was unroofed and large pipes twisted a broken.

Probably the most unusual damage of the storm was at t farm of W. B. Sanford, more than a quarter of a mile east an south of the packing company plant. An immense oak tr weighing several tons was lifted from the ground and hurled distance of twenty feet upon the kitchen of the farmhous The tree dislodged the wing of the house and tore it from it foundation. Charles Green, the foreman, and Mr. and Mr Oscar Rogers, with their little daughter, did not venture fro the kitchen until the tornado had passed, although the roof wa demolished.

The "twister" then struck the immense barn, 75 by 100 feet and unroofed it entirely. Three horses were pinioned und the debris, but were rescued later. A calf was killed. A tool house at the Sanford home was picked of its shingles, as clean ly as one might pick a chicken. The house itself was not moved

The greatest damage at the Sanford farm was the uprootin or twisting of about 200 fine oak trees that dotted the 320-acr tract. From the Sanford farm the storm proceeded northeast ward, across a field to another grove. Here many trees wer uprooted. One large tree, six and one-half feet in circumfer ence, was split in two three or four feet from the ground nearl to the limbs of the tree. It was as if a mighty wedge had bee forced through the tree trunk. The intensity of the storm spe itself among the thick trees of this grove. The path of the stor was about one mile long and about 100 yards wide.

S Stacks

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

[illegible]
JUL [illegible] 1916

CLIMATOLOGICAL DATA

MISSOURI SECTION

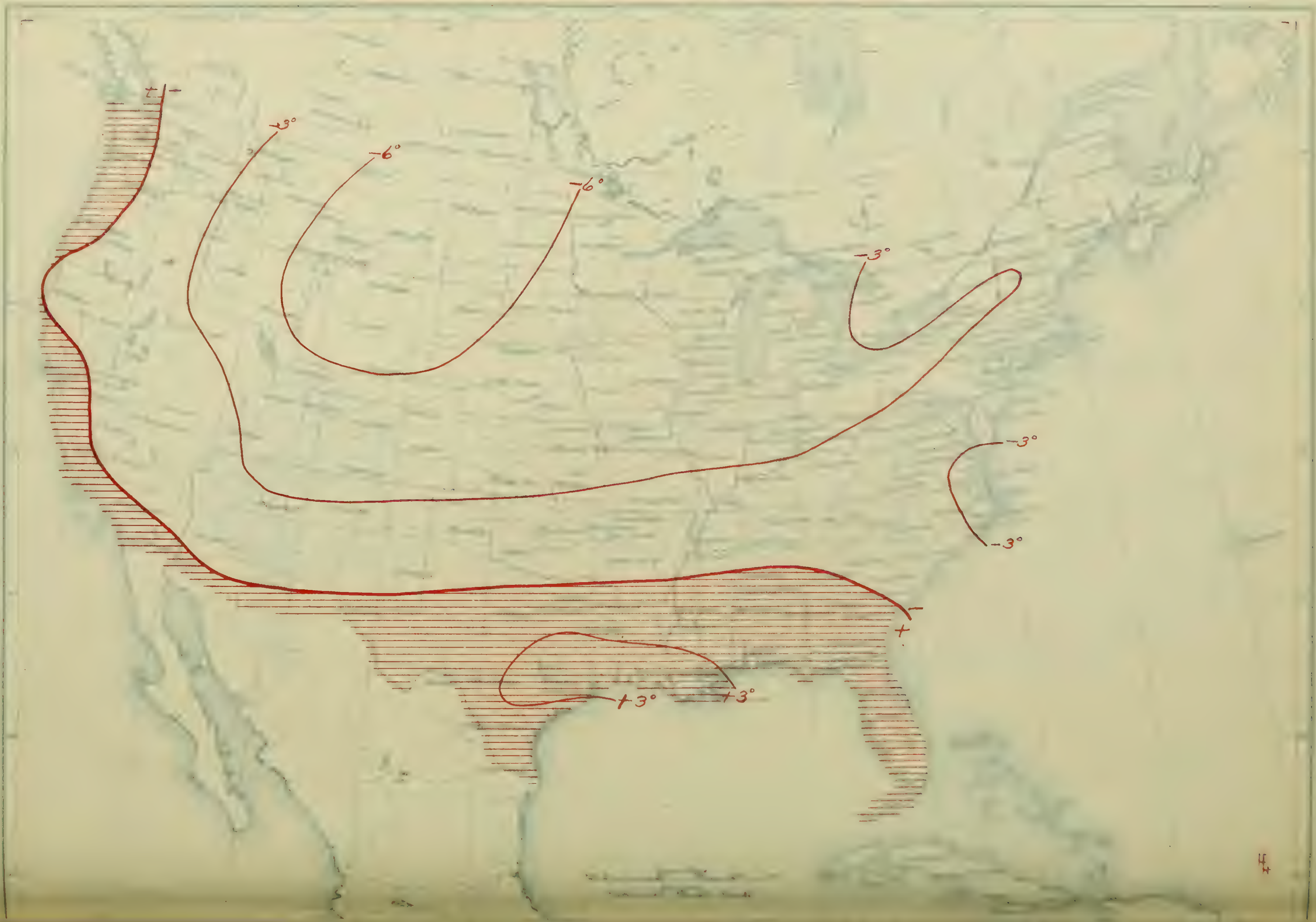
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JUNE, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JULY 27, 1915

Departure of the Mean Temperature from the Normal, June, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

XIX. Columbia, Mo., June, 1915. No. 6

GENERAL SUMMARY.

nusually cool weather, excessive cloudiness with continued s in all divisions, except the southeast, floods, and more or severe local storms were the marked features of June, 1915. ther Junes have been wetter, but viewing the present month n the standpoint of both temperature and moisture it is the t abnormal since 1902, when nearly similar conditions ob- ed. If, however, May and June be considered together, no ious years, as far back as 1888, experienced a similar period was as cool and wet.

ean temperatures were below normal most of the time, but xtremes were not unusual. The warmest period of the th prevailed generally from about the 20th to the 29th, and oolest during the first decade. In the southeast low- ls there were a number of days with temperature above 90°, for the State as a whole there were only three days on ch the warmth exceeded that value.

ains were frequent and copious. The six days from the to the 27th, inclusive, was the only period free from rain. arvest progressed under difficulties; and owing to lack of shine, warmth and cultivation, corn was backward. Pas- s and all kinds of hay made fine growth, much of the latter g ruined, however, by excessive moisture.

he Missouri River and most of its tributaries were in flood ng the first part of the month, destroying thousands of s of crops, and much property, but no human or animal s were lost.

PRESSURE.

ne weather, like that of May, was largely dominated by pressure waves, consequently stormy and rainy conditions ired. The mean sea-level pressure for the State, 8 stations rting, was 29.95 inches, which is about normal.

TEMPERATURE.

he monthly mean temperature, 66 stations reporting, was °. The mean departure from the normal for 52 stations ing 10 or more years' record was minus 2.5°. The mean perature and departure from normal for each division were llows: northeast plain, 69.5°, or 3.8° below normal; south- lowlands, 74.5°, or 0.6° below normal; Ozark plateau, , or 1.6° below normal; southwest plain, 71.2°, or 2.9 w normal; and northwest plateau, 69.0°, or 3.2° below nal. The highest local monthly mean was 77.4° at Caruth- ille, and the lowest was 66.0° at Unionville. The highest perature recorded was 98°, at Sikeston on the 17th, and lowest was 38°, at Unionville on the 9th. Temperatures of or higher occurred on an average of 3 days.

HUMIDITY.

he relative humidity averaged about 6 per cent higher than al; and, from a physiological standpoint, there was some omfort on days when temperatures exceeded 85°, especially he larger cities.

PRECIPITATION.

he average precipitation, 80 stations reporting, was 6.51 es. The departure from the normal for 68 stations having r more years' record was plus 1.87 inches, which is the st excess in the last 13 years. The average precipitation departure from normal for each division were as follows: heast plain, 8.30 inches, excess 3.98 inches; southeast low- s, 2.72 inches, deficiency 1.60 inches; Ozark plateau, 6.19 es, excess 1.53 inches; southwest plain, 7.65 inches, excess inches, and northwest plateau, 6.26 inches, excess 1.40 inches. The greatest local monthly amount was 12.88 inches, at Lamar, and the least was 0.57 inch at Sikeston. The greatest amount in any 24 consecutive hours, was 4.86 inches at Brunswick on the 10th and 11th; but amounts of 2.50 inches or more within 24 hours, occurred at twelve or more stations.

The average number of days with 0.01 inch or more precipitation was 12.

WIND.

The prevailing winds were from the southeast. Fresh to strong winds, and in some cases severe local storms, occurred on several dates, the most noticeable and destructive being on the 13th, 18th, 29th and 30th.

SUNSHINE AND CLOUDINESS.

Cloudiness was excessive in all parts of the State, except perhaps the southeast. Sunshine averaged from 15 to 20 per cent below normal. The average number of clear days was 11, partly cloudy, 10, and cloudy 9.

MISCELLANEOUS PHENOMENA.

Halos, lunar—23rd, 25th and 26th.

Halos, solar—3rd, 17th, 22d, 23rd, 24th, 25th, 26th and 29th.

Thunderstorms—3rd, 4th, 6th, 7th, 10th, 11th, 12th, 13th, 14th, 16th, 17th, 18th, 19th, 20th, 21st, 23rd, 27th, 29th and 30th.

ERRATA FOR MAY, 1915.

Grant City—Dates of greatest 24-hour precipitation should be 19th and 26th.

Louisiana—Days with .01 or more precipitation should be 16.

Marshall—Mean maximum temperature should be 73.8, and the monthly mean should be 62.4.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity. 7 a. m.	7 p. m.	SUNSHINE Total hours.	Percentage of possible.	WIND. Total movement, miles.	Average hourly velocity	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	29.97	88	......	229	51	4,526	6.3	31	nw	29
Hannibal	29.96	86	......	......	......	5,632	7.8	50	se	18
Kansas City	29.95	81	68	234	59	7,525	10.5	50	nw	30
St. Joseph	29.94	85	64	271	60	5,138	7.1	47	nw	29
St. Louis	29.95	84	72	293	66	7,892	11.0	49	nw	13
Springfield	29.96	86	68	265	61	6,232	8.7	40	nw	13
Cairo, Ill	29.94	80	68	......	......	4,617	6.4	35	sw	5
Keokuk, Iowa	29.96	84	70	310	75	4,671	6.5	30	se	18

COMPARATIVE DATA FOR JUNE.

YEAR	Temperature Mean	Departure	Highest	Lowest	Precipitation Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	Number of Days With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	72.6	−0.5	103	37	6.20	+1.26	......	0	7	....	....	....
1889	70.7	−2.4	100	38	4.66	−0.28	......	0	6	....	....	....
1890	77.2	+4.1	105	50	2.59	−2.35	......	0	6	....	....	....
1891	73.3	+0.2	103	46	6.94	+2.00	......	0	13	....	....	....
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	0	9	12	12	6
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0	9	12	11	7
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	8.15	0	9	13	12	5
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	2.81	2.99	0	6	18	10	2
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	0	12	11	10	9
1903	67.3	−4.2	95	36	3.25	−1.69	4.90	0	9	15	9	6
1904	70.5	−2.6	93	45	6.42	+1.58	5.41	0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0	7	15	10	5
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	0	9	11	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	T.	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0	12	11	10	9

Climatological data for June, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	6.41	+0.46	2.30	0	13	15	2	13	se	C. Randecker.
Brunswick	Chariton	652	36	68.8	− 4.4	87	12	47	8	30	9.77	+4.08	4.86	0	15	8	4	18	e	Louis Benecke.
Columbia	Boone	784	26	69.6	− 4.9	89	5	46	8	29	9.11	+4.73	1.61	0	18	3	12	15	se	U. S. Weather Bureau.
Fayette	Howard	725	31	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	69.6	− 3.1	88	12	41	8	34	9.96	+5.07	2.07	0	18	6	0	24	s	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	8.27	+4.64	2.53	0	12	6	10	14	se	J. W. Pulham.
Hannibal	Marion	534	23	69.4	− 3.9	89	12	46	8	30	8.93	+5.41	2.32	0	15	9	9	12	sw	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	9.09	+4.54	2.20	0	15	6	11	13	e	C. T. Maushund
Jefferson City	Cole	628	30	70.4	− 3.6	89	6	49	8	28	5.67	+1.39	1.40	0	14	21	0	9	w	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	7.72	.....	2.80	0	12	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	69.7	− 1.9	87	6	44	8	30	7.15	+2.96	1.68	0	15	18	9	3	se	J. T. Farrell.
Macon	Macon	881	18	68.0	− 5.0	88	12	43	9	32	7.72	+2.80	1.20	0	13	8	12	10	sw	John A. Cook.
Mexico	Audrain	797	38	69.2	− 4.1	91	5	44	8	33	8.01	+2.67	2.11	0	15	13	1	16	n	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	70.3	− 3.5	89	12	52	9	28	8.97	+4.34	2.14	0	14	5	13	12	s	E. E. Steines.
Palmyra	Marion	652	4	68.1	.....	90	12	42	8	31	8.28	+3.96	1.64	0	12	7	11	12	se	W. B. Markell.
St. Catherine	Linn	914	3	68.0	.....	84	6†	44	9	30	4.42	.....	1.29	0	14	3	26	1	ne	L. D. Baker.
St. Charles	St. Charles	614	38	70.8	− 2.8	88	6	45	8	32	7.92	+3.72	1.64	0	14	7	11	12	s	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	72.0	− 3.1	90	12	54	8	27	9.77	+5.30	4.47	0	13	11	16	3	s	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	71.6	.....	90	12	54	8†	27	9.37	.....	2.37	0	14	12	14	4	se	St. Louis University.
Steffenville	Lewis	576	23	70.7	− 2.2	90	12	42	9	35	9.63	+5.74	2.00	0	11	9	16	5	w	Frank Hall.
Unionville	Putnam	1,072	23	66.0	− 6.2	86	12†	38	9	34	10.29	+6.11	3.82	0	13	9	9	12	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	7.96	.....	1.96	0	10	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	69.8	− 3.8	91	12	46	8	36	8.17	+3.64	2.63	0	15	6	9	15	s	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	2.25	−1.16	0.60	0	8	20	1	9	e	D. L. Albert
Cardwell	Dunklin	225	5	75.1	.....	98	20	52	9	35	2.43	.....	0.45	0	10	24	4	2	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	77.4	+ 0.1	96	20	54	9	34	3.27	−0.69	0.78	0	9	23	5	2	e	H. E. Averill.
Doniphan	Ripley	440	11	73.9	+ 0.9	96	20	51	9	33	3.16	−1.06	1.35	0	8	17	6	7	sw	W. W. Martin.
Jackson	Cape Girardeau	458	25	73.2	− 0.6	93	5†	51	9	35	3.71	−0.53	1.43	0	10	6	5	19	s	L. M. Bean
Marble Hill	Bollinger	420	24	72.8	− 1.1	91	27	50	8†	36	2.69	−1.63	0.63	0	8	17	10	3	w	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	2.13	−1.97	0.60	0	11	15	4	11	se	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	3.62	.....	0.80	0	9	16	0	14	s	Christian Seabaugh
Poplar Bluff	Butler	333	12	73.2	− 2.7	96	20	51	9	30	3.69	−1.63	1.51	0	7	18	4	8	.....	M. S. Wiseneart.
Sikeston	Scott	328	15	76.2	+ 1.7	98	17	51	8	38	0.57	−3.81	0.30	0	4	5	19	6	sw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	74.4	− 0.8	91	20	56	8	24	2.42	−1.89	0.79	0	9	8	12	10	se	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	4.34	+0.80	1.42	0	12	11	2	17	s	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	6.62	+1.72	1.85	0	11	12	5	13	e	Mrs. Nellie V. Houser
Belle	Maries	1,000	24	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	A. J. Wofford.
Birchtree	Shannon	1,200	22	70.8	− 1.9	90	20	49	8	29	6.14	+1.62	1.83	0	8	15	8	7	sw	V. H. Kirkendall.
Bolivar	Polk	1,020	28	72.2	− 0.8	91	20	44	8	33	5.96	+0.40	1.73	0	9	18	11	1	e	A. C. Fink.
Cassville	Barry	1,500	5	70.0	.....	91	20	47	8	36	5.75	.....	1.90	0	5	24	3	3	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	69.5	.....	87	5†	45	8	26	6.06	.....	1.02	0	13	20	8	2	se	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	71.3ᵃ	− 1.7	92	20	42	14	34	7.77	+2.18	2.84	0	11	20ᵇ	3ᵇ	5ᵇ	.....	H. E. Dean.
Duncan	Webster	1,400	3	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	C. A. Mingus.
Eldon	Miller	934	15	70.0	.....	90	5	45	8	32	8.08	+3.27	1.34	0	14	3	27	0	nw	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	72.4	.....	89	6	55	7†	23	5.63	.....	1.70	0	9	21	8	1	s	R. C. Walton.
Gano ‡‡	Dent	1,250	12	79.9	− 2.4	89	5†	46	8	31	7.23	+2.88	3.40	0	11	10	12	8	s	A. C. Leach.
Goodland	Iron	1,000	11	69.6	− 1.5	89	5	40	8	44	4.45	+0.92	1.05	0	8	11	14	5	s	F. M. Adams.
Hollister	Taney	1,000	7	74.9	.....	96	9†	50	1†	34	8.16	+4.09	2.25	0	9	22	0	8	sw	W. P. Chapmann
Houston	Texas	1,280	23	71.3	− 0.6	89	20	48	8	28	5.41	+0.40	2.50	0	8	17ᵃ	9ᵃ	3ᵃ	se	R. F. Harmon.
Ironton	Iron	925	38	71.4	− 0.6	90	6†	45	8	35	5.51	+0.43	2.65	0	12	2	18	10	s	W. H. Delano.
Koshkonong	Oregon	911	15	74.8ᵈ	+ 0.5	93	20	52	10	36	3.97	−0.16	1.44	0	8	11ᶜ	10ᶜ	6ᶜ	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	72.1	− 2.9	95	22	50	2	32	5.46	−0.05	0.95	0	15	9	9	12	s	O. L. Weissgerber.
Lockwood	Dade	1,088	21	72.0	− 2.3	92	20	48	8	27	10.20	+5.76	1.80	0	10	11	12	7	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	70.3	− 1.5	89	20	48	8	27	7.61	+3.31	1.63	0	12	7	14	9	s	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	71.3	− 2.4	92	20	46	8	28	5.08	−0.24	1.15	0	9	9	12	9	sw	J. R. White & Son.
Neosho	Newton	1,083	33	72.6	− 1.1	92	20	46	8	34	6.74	+1.21	2.12	0	11	19	6	5	sw	W. O. Buck.
Rolla	Phelps	1,139	34	70.8	− 2.1	92	5	46	8	34	4.29	0.00	1.46	0	14	7	13	10	w	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	70.3	− 2.0	90	20	50	8	23	5.81	+0.62	1.21	0	16	13	14	3	se	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	74.0	.....	93	10	48	8	32	8.21	.....	1.92	0	15	4	12	14	sw	Darby Fruit Farm.
Clinton	Henry	800	29	72.0	.....	94	29	48	8	32	9.25	+4.29	2.15	0	9	8	18	4	se	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	69.8	− 3.4	89	10	49	15	36	6.50	+1.87	2.04	0	13	5	4	21	ne	A. J. Sharp.
Lamar	Barton	964	35	71.4	− 2.5	93	20	47	8	33	12.88	+7.98	2.87	0	13	11	5	14	se	E. H. Adams.
Lamonte	Pettis	863	27	70.1	.....	89	5	45	8	32	4.53	−0.27	0.81	0	14	7	18	5	sw	J. Ed. Hall.
Marshall	Saline	779	25	69.6ᵃ	− 3.2	88	12	45	8	35	6.41	+1.71	1.58	0	10	15	6	9	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	....	.....	....	....	....	....	....	7.46	+2.14	2.40	0	14	14	10	6	sw	C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	6.23	+1.67	1.48	0	12	11ᵉ	1ᵉ	13ᵉ	nw	W. E. Mathews
Warrensburg	Johnson	883	37	71.2	− 2.8	91	10	48	8	33	6.32	+1.34	1.88	0	14	3	20	7	sw	Geo. H. Collins.
Warsaw	Benton	883	11	71.8	− 2.5	92	5	45	8	32	7.54	+2.28	1.75	0	14	4	22	4	nw	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	8.87	.....	2.16	0	11	12ᵇ	4ᵇ	12ᵇ	w	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	70.4	− 2.5	88	25	46	9	32	9.69	+4.96	2.65	0	14	14	9	7	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	68.8	− 3.2	88	12†	40	9	32	3.17	−1.12	0.80	0	12	5	18	7	nw	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	4.82	−1.96	1.43	0	14	13	4	13	.....	Hocey O. Dupy
Conception	Nodaway	982	31	67.6	− 3.1	89	30	43	9	31	5.02	+0.58	1.85	0	10	0	28	2	se	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	67.8	− 3.4	90	12†	43	9	31	6.88	+2.62	2.00	0	10	24	1	5	nw	W. H. Campbell.
Kansas City	Jackson	963	27	70.0	− 3.0	87	12	52	9	26	7.88	+3.22	2.11	0	16	4	19	7	n	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	68.8	− 3.6	85	12	46	9	25	4.60	+0.15	1.75	0	13	14	5	11	se	J. F. Sharp.
Lexington	Lafayette	813	34	70.0	− 2.2	88	29	49	1†	30	7.93	+2.86	2.80	0	14	11	2	17	s	J. W. Keithley.
Liberty	Clay	864	27	70.2	− 3.1	89	25†	47	8†	41	8.16	+2.95	2.45	0	15	7	17	6	se	W. C. Wilmott.
Maryville	Nodaway	1,160	25	68.0	− 3.2	91	25	41	9	33	4.62	−0.39	2.19	0	14	18	2	10	e	J. R. Brink.
Oregon	Holt	1,113	60	67.4	− 4.9	85	25	44	9	26	6.72	+1.82	2.10	0	10	13	11	6	se	Tom Curry.
St. Joseph	Buchanan	967	44	69.8	.....	89	12	48	9	28	5.77	+0.68	2.10	0	13	7	18	5	se	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	68.4	.....	87	12	42	9	29	6.69	.....	1.63	0	13	13	11	6	ne	John F. Frazier.
Trenton	Grundy	812	21	69.6	− 2.9	87	25	45	9	27	5.64	+1.80	1.33	0	15	10	11	9	s	W. H. Estes.
State means and extremes				70.8	− 2.5	98	14†	38	9	44	6.51	+1.87	4.86	0	12	11	10	9	se	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D No. 1; of Sublett, Kirksville, R.F.D. Sublett.

Daily precipitation for June, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																
ville	Missouri				.15	.79	T.	.40				2.30		.56	.20	.30		.42	.90		.08	.12						T.	.09		.10		6.41
swick	Grand				.24	.23		.39		.03		4.86	.03		1.61	.12		.10	.86		.04	.71								.04	.51		9.77
mbia***	Missouri				.76	.21	.01	.47			1.26	.35	T.	.10	.73		1.08	.52	.75	.02	.19	.53						1.20	.02	.90	.01		9.11
ette	do																																
on	do				.27	.68	.15	.34			.52	.49		.15	.81		2.07	.12	1.10	.02	.01	1.91						.38	.02	.07	.85		9.96
n	Mississippi				.30			.17			1.15	.02	.48	.03	.55				.90	.55	1.59							.05	2.48				8.27
nibal***	do				.63		.29	.81			2.29	.03	T.	.04	1.01	.01	.02	.07	.47	T.	1.75	.12						.33	1.06				8.93
mann	Missouri					.35	.34	.02				1.60		.37	.16	.15		.43	.38		.06	2.20						1.60	1.12	.02	.24		9.09
rson City	do					.95		.30				.50		.29	.15	.63		.08	1.40		.08	.70						.12	.05	.04	.38		5.67
tesville	Chariton				.52	.12	.35				2.80			.08	1.21				.64	.03	.98							.43		.44	.12		7.72
siana	Mississippi				1.22			.52		.12	1.68		T.	.11		.09		.71	.09	.08	T.	1.57			.03			.15	.55	.09	.14		7.15
on	Chariton			T.	.91	.31	T.	.42		T.		.40	.01	.34	1.20	.33		.68	.90		.06	1.02			T.		T.		1.14	T.	T.		7.72
neo	Mississippi					.79	T.	.39	.04			1.12		.11	.08	.95		.06	.85		.01	2.11						.42	.91	.05	.12		8.01
ield	Meramec				.02	.25		.04			T.	.96		.97	.02		.29	T.	.47	.04	.03	2.14						1.48	1.10		1.16		8.97
myra	Mississippi				.09	1.33		.95				1.40			.65	.19			1.17		.04	1.64						.02	.45	.35			8.28
atherine	Grand				.17	T.		.06	T.		.74	.02	.35	.38	.71	T.		.06	1.29	.02	T.	.43						.04	.13		.02		4.42
Charles	Missouri	.04				.04		.04			T.	1.18		.60	.30		.25		.54	.27	.61	1.64						1.34	1.00		.07		7.92
Louis (1)***	Mississippi	T.			.06	.03		T.			.37	.59		.63	T.		.36	T.	.86	T.	1.63	.08						2.45	2.56	.10	.05		9.77
Louis (2)	do	T.			.24	.07		T.			.36	.57		.75	T.		.33		.89	.01	1.87	.04			T.			2.37	1.62	.22	.03		9.37
enville	do				1.00			.61	T.		.10	.75		.25	2.00		T.	T.	.80	.37	T.	1.61			T.			1.77	.37				9.63
nville	Grand				T.	.85		.30			.28	.20	.16	2.00	.12	.10	.06		1.70	T.	.52	3.30							.70				10.29
dalia	Mississippi				.85			.55			.12	1.50			.56	.12			1.96		1.60								.60	.10			7.96
renton	do	T.				.39	.03	.20				1.40		.45	.11	.03		.46	.32		.03	2.63						.77	1.30	.02	.03		8.17
theast Lowlands.																																
Girardeau	Mississippi						.60					.15			.30			.10				.50	.20					.10	.30				2.25
well	do				T.	.18		.10				.28		.08	.30				.18	T.		.38	.45		.38			.10					2.43
ersville	do					.40		T.				.50		.32	.05					.20		.55	.78		.08	T.		.39			T.		3.27
p'an	Black					.32								.16	.30							1.35	.08		.20			.35			.40		3.16
son	Mississippi					.37						.47		.42	.09		.07		.20			.61			.02			1.43		.03			3.71
le Hill	do	.10					.63					.39		.23	.35	.12						.45						.42					2.69
Madrid	do						.40	.02	.40				.15		.25					.03	.01	.25	.60			.01		.01					2.13
n (near)	do					.19	.25						.10			.25		.38	.80	.60								.50	.55				3.62
ar Bluff	Black							1.25							.11	.20			.04				1.51			.03		.55					3.69
ton	Mississippi						.07							.30														.18		.02			0.57
, Ill.***	do	T.				.79	T.	.01				.03		.16	.78				T.	.01		.36			T.			.27		.01	T.		2.42
rk Plateau.																																
ngton	Gasconade					.68	.16	.06				.58		.52	.12				1.42		.10	.12	T.		T.				.42	.06	.10		4.34
ell	Osage				1.00	T.	.08	T.				.72	.10	.25	.52	.50			.75		1.85	.40						T.			.45		6.62
	Meramec																																
tree	Black					.80						.35		.37	.18				.68		.68							1.83			1.25		6.14
ar	Osage				.05				.23			1.73		.50	1.20				.03	.45					.35			1.42					5.96
ille	White							1.02						1.90		1.03							T.		1.72		.08						5.75
ser	Gasconade					.90	.10	.05			.82	.46	.25		.75		.04	.02	.92	.11								1.02			.62		6.06
	Neosho							.66				1.73			1.02			.04	.15				.03		2.84		.47	.12	.04	.67			7.77
an	Osage																																
n	do				.31	.70		.10			.40	.91		.33	1.34			.58	1.20	.64		.02			.10			.65			.80		8.08
City	Black					1.15						.20		.25	.30					.26		1.70					.72		1.00		.05		5.63
	Meramec	.12			.30			.19				.50		.06	.50				1.52	.10	T.	.35			T.			3.40			.19		7.23
land	Black							1.05			.80			.32				.18	.77			.45						.80		.08			4.45
ster	White					.25		.60				1.80		.75	1.05		.20	.70							2.25		.56						8.16
ton	Gasconade				T.	T.		.38				.74		.64	.30			T.	.35	T.		.35			T.			2.50			.15		5.41
on	Mississippi	T.	T.			T	.25	T.				.27	T.		.30	.05		.17	.95	.10	T.	.50	.25		T.	T.		.20	2.45	.02	T.		5.51
konong	Black					T.						.41		.52	1.44				.02				.03		.56			.77			.22		3.97
non	Osage					.60	.04	.05				.95	.22	.51	.28	.62			.75		.02	.39	.25			.10		.14	.54				5.46
wood	do							.98				1.80			1.20		1.16	.10	.93	1.77					1.10		.70	.46					10.20
tain Grove	White						.47	.68			.40	.74			.65	.76			1.63		.08	.10			.26	T		1.12	.72				7.61
t Vernon	Neosho							.52				1.13		.20	1.15		.12		.15						1.10		.48	.23					5.08
ho	do		T.					.55				2.12		.01	1.20		.02	.02	.34	T.			.02	1.86			.45	.15	T.				6.74
	Meramec					.16	T.	.13				.50		.36	.09	.16		.03	1.46		.15	.15	.03					.77	.07		.23		4.29
gfield***	White			T.	.09	.07	.36	.03				1.21		.25	1.03		.26	.24	.02	.37		T.		.01	.78		.09	.04			.96		5.81
tland	Osage																																
thwest Plain.																																
et	Osage			T.	.11			.35			T.	1.62	.01	.01	1.92		.05	.23	1.62	.22		.35		.13	.11			.07			1.41		8.21
on	do				.70			1.25				2.15		1.55					1.30	.20		.20						.50			1.40		9.25
sonville	do				.31			.56				1.75	.35	.15	.10	.16	T.	.03	2.04		.15				.33			.09		T.	.48		6.50
ar	Neosho				T.	.21		.60	.02			1.77	.69	.03	1.22	.34		.44	1.40		2.87			T.	.88			2.41					12.88
nte	Missouri				.61		.10	.51		T.	.75	.50	T.	.25	.35		.10	.05	.81	.05	T.		T.	T.	.20			.05		T	.20		4.53
all	do				.32	.58		.73			.71	1.58		T.	.39		.80	.35	.10						T.			T.	T.		.85		6.41
da	Osage				.25		.60					2.40		.20	1.36		.15	.15	.30	.70					.80		.15	.25		.10	.05		7.46
ola	do							.38	.02			1.48	.12	.18	.92	.30			.76			.46			.23			.83			.55		6.23
ensburg	Missouri				1.88			.59			.36	1.27		.48	.20		.02	.09	.67	.09	T.	.06	T.	T.	.18			.09			.34		6.32
aw	Osage			T.	.52	.63		.25			T.	1.75		.15	1.03		.11	.09	.71	.20		.48		T.	.16		T.	.92			.54		7.54
rly	Missouri				.54	.12		.98				2.16	.04	T.	1.19	.04		T.	1.69		.08	.72			T.	T.				T.	1.31		8.87
thwest Plateau.																																
on	Grand			.12	.41			.15			1.75		.48	.06	.62			2.65		.08		.45					.62		.05	1.45	.80		9.69
ny	do			.25	.15			.36			.80	T.	.40		.05		T.	.25	.55	.07	.10	.12			T.				T.	T.	.07		3.17
cothe	do				.09	.04		.10			.07	1.03	.06	.40	.45	.28			.77		.02	.04					.04				1.43		4.82
ption	Missouri			.07	.12			.31			1.36		.05				T.	.51	1.34	T.	.20					T.				.16	.90		5.02
City	Grand			.28	.25			.17			.78	T.	T.				.14	.78	1.20	T.	1.23	2.00	T.	T.	.50					T.	T.		6.88
as City***	Missouri				.09		.16	.26			2.09	.15	.25	.01	1.17		.21	1.24		.08	.01		.01	.28						1.22	.65		7.88
er	Grand				.20	.02		.25			.16	.62	.50	.22	.25	.05	.03		.50			.05									1.75		4.60
ngton	Missouri				.05	.26		.16	.14			1.29	.20	.09	.89	.11	T.	.05	2.80		.09	.03									1.77		7.93
ty	do			.11	.67	1.14		.37			.37	2.45	.13	.20	.95		.02	.32	.80	.10		T.		T.	.10					.43			8.16
ville	do				.27	.03		.24			1.22	.05	.08	.02			.09		2.19	.01	.04	.19					.05				.14		4.62
on	do			.34	.20			.18			1.20		.07	T.	T.		.05	2.10		.02	T.									1.81	.75		6.72
eph***	Missouri			.01	.29			.13			.30		.52	.01	.08		.05	1.73		T.	.03			.01						2.06	.55		5.77
o	do			.16	.58			.04			.94		.59				.01	1.63	1.24	.04	.35	.04								.12	.95		6.69
on	Grand			.02	.07			.28		.29	1.33	1.06	.40	.10	.30	T.	T.	.98	T.	T.	.07	T.		.03		.10				.17	.44		5.64

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning: amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station: precipitation is for 24 period, midnight to midnight.

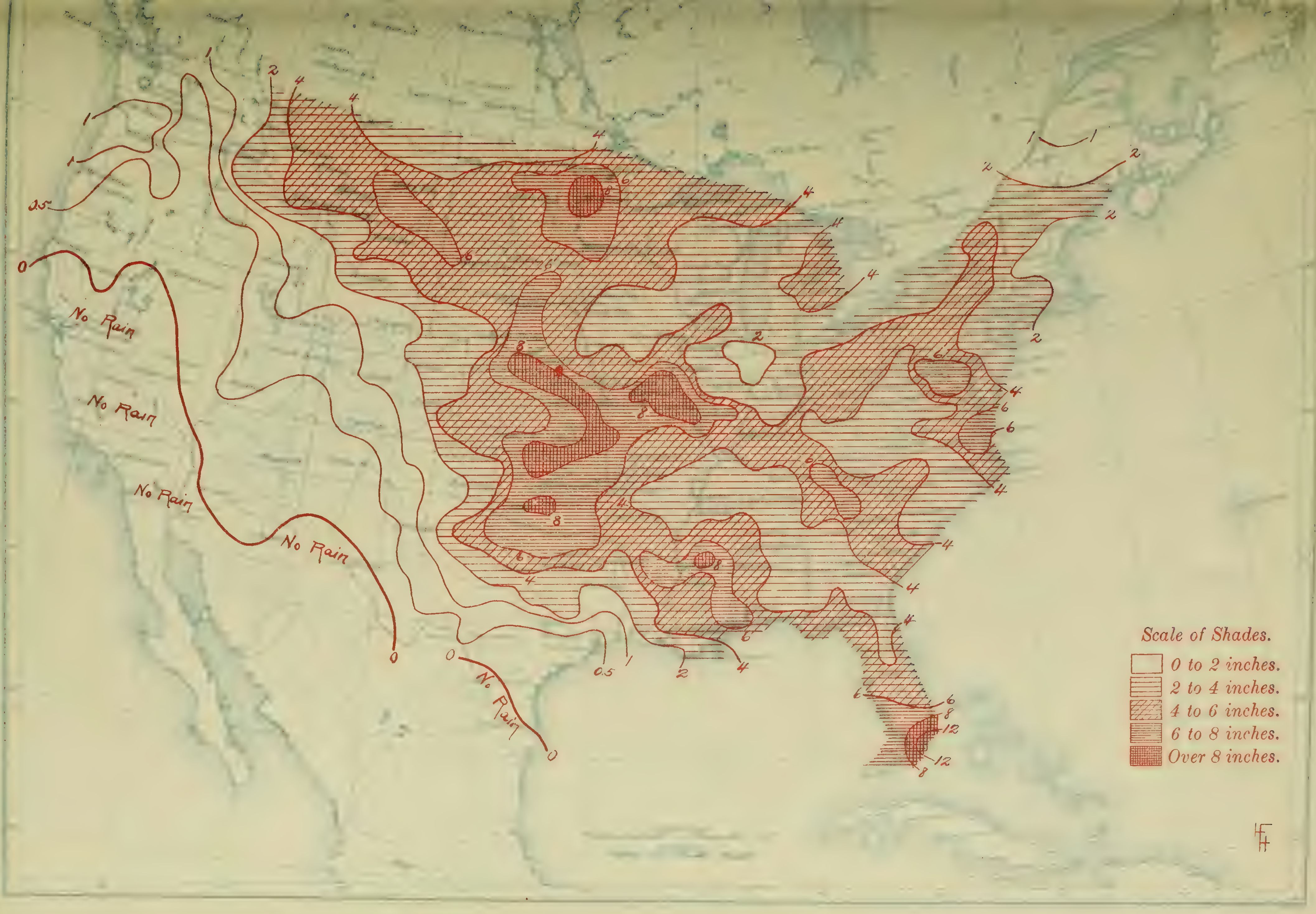
**Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for June, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Northeast Plain.																																	
Brunswick §§	Maximum	75	79	80	81	86	83	66	71	70	81	79	87	73	60	80	79	76	77	71	75	82	81	78	82	84	81	78	81	[illegible]	78	...	[illegible]
	Minimum	51	55	57	61	65	66	52	47	48	51	63	63	62	55	51	56	60	60	62	61	63	65	58	60	65	65	68	68	65	66	...	[illegible]
Columbia	Maximum	71	78	80	85	89	85	66	73	70	82	78	89	75	67	80	81	77	78	78	77	82	80	79	79	82	82	78	79	[illegible]	74	...	[illegible]
	Minimum	55	54	62	66	65	66	51	46	51	62	61	69	61	55	51	62	59	65	62	63	65	58	56	65	64	64	64	63	65	[illegible]	...	[illegible]
Fayette	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hannibal	Maximum	75	77	80	78	85	86	71	73	68	74	79	89	79	65	80	80	78	79	74	78	82	77	79	81	82	84	81	72	[illegible]	79	...	[illegible]
	Minimum	56	54	58	61	68	68	49	46	50	60	63	69	61	54	50	63	66	62	58	61	67	60	55	60	64	64	68	62	[illegible]	63	...	[illegible]
Jefferson City §§	Maximum	75	80	83	85	88	89	68	76	75	81	77	87	75	68	83	81	82	81	81	78	81	82	81	81	83	83	75	82	84	[illegible]	...	[illegible]
	Minimum	55	54	54	64	64	67	57	49	51	56	63	66	62	57	52	60	59	62	63	65	65	61	58	65	65	64	63	63	65	67	...	[illegible]
Macon	Maximum	78	77	80	81	87	81	65	72	69	77	81	88	72	60	80	86	77	75	74	78	82	80	79	83	84	84	80	78	84	[illegible]	...	[illegible]
	Minimum	52	54	59	62	64	64	49	41	43	49	61	63	60	53	48	55	55	60	58	59	61	61	54	61	62	64	66	65	62	[illegible]	...	[illegible]
Mexico §§	Maximum	76	80	82	86	91	88	67	76	72	83	80	89	74	66	82	82	80	80	79	78	82	81	82	82	85	85	80	75	[illegible]	[illegible]	...	[illegible]
	Minimum	55	52	56	62	63	66	52	44	48	50	61	65	63	55	53	53	56	61	59	61	62	59	54	57	62	63	65	65	65	[illegible]	...	[illegible]
Oakfield	Maximum	72	78	83	81	87	88	77	75	73	85	79	89	81	71	80	84	81	86	78	79	79	83	80	75	82	83	76	85	82	[illegible]	...	[illegible]
	Minimum	58	53	60	65	64	65	54	48	52	57	62	67	59	60	55	58	57	61	61	64	65	60	59	64	66	61	65	60	62	65	...	[illegible]
St. Catharine	Maximum	75	77	76	79	83	84	74	72	67	75	73	84	86	66	78	80	75	75	70	73	79	79	76	81	84	86	79	79	82	74	...	[illegible]
	Minimum	51	55	59	63	65	61	50	45	41	59	62	66	58	53	48	61	53	63	61	58	64	59	56	61	63	64	66	66	68	59	...	[illegible]
St. Louis (1)	Maximum	72	78	82	84	87	88	77	71	73	84	80	90	80	74	86	85	82	85	80	81	81	82	81	78	81	85	78	81	82	83	...	[illegible]
	Minimum	61[1]	59	63	66	68	67	57	51	56	57	63	68	60	60	57	61	61	62	64	65	65	68	65	66	62	68	66	66	68	62	...	[illegible]
Unionville §§	Maximum	76	80	76	80	84	82	62	70	72	76	82	86	70	65	80	78	76	75	72	74	86	78	78	85	86	82	83	82	84	82	...	[illegible]
	Minimum	46	48	51	54	60	64	48	43	38	43	50	60	56	52	50	56	48	52	54	51	56	57	56	60	62	64	61	64	58	60	...	[illegible]
Warrenton §§	Maximum	74	89	84	86	90	89	65	75	75	85	80	91	75	69	82	84	84	82	76	79	80	[illegible]	84	80	85	85	79	79	82	79	...	[illegible]
	Minimum	57	55	60	64	54	65	55	46	50	54	62	65	60	49	52	57	57	61	60	63	64	66	59	63	61	61	64	63	64	63	...	[illegible]
Southeast Lowlands.																																	
Cardwell	Maximum	80	83	85	90	93	94	90	78	85	91	93	93	88	81	80	87	89	91	95	98	93	94	83	70	82	85	81	[illegible]	87	90	...	[illegible]
	Minimum	58	55	56	57	64	66	67	66	52	56	66	66	68	66	56	56	60	66	70	75	73	70	65	60	60	58	70	61	61	64	...	[illegible]
Caruthersville	Maximum	86	85	88	92	91	93	87	81	88	93	90	92	91	81	85	83	89	91	93	96	93	87	87	77	86	87	87	[illegible]	86	88	...	[illegible]
	Minimum	62	59	60	66	69	70	71	57	51	63	70	67	72	68	66	69	67	65	73	75	72	72	65	64	60	62	72	72	65	68	...	[illegible]
Doniphan	Maximum	77	81	85	90	89	92	84	8	85	90	87	89	85	80	82	81	86	91	88	96	90	85	82	73	83	82	82	88	86	88	...	[illegible]
	Minimum	58	56	57	65	66	64	65	52	51	57	69	65	66	64	61	55	61	70	64	73	65	68	60	63	64	58	68	61	67	65	...	[illegible]
Jackson	Maximum	75	80	85	90	93	93	90	85	86	87	85	90	84	80	80	86	85	89	89	90	85	[illegible]	87	78	83	[illegible]	89	87	[illegible]	[illegible]	...	[illegible]
	Minimum	61	55	57	63	67	66	61	55	51	58	56	67	65	66	61	57	59	68	65	64	65	63	51	62	53	57	64	[illegible]	69	65	...	[illegible]
Marble Hill	Maximum	73	82	84	90	89	90	81	76	86	86	83	89	84	83	83	85	84	86	87	80	90	87	85	[illegible]	[illegible]	[illegible]	93	80	88	86	...	[illegible]
	Minimum	60	53	59	63	63	64	62	50	50	55	61	65	65	66	61	59	55	54	59	59	65	67	55	54	55	70	71	[illegible]	[illegible]	[illegible]	...	[illegible]
Poplar Bluff	Maximum	74	76	83	86	91	92	91	82	77	85	89	89	92	81	80	82	81	87	92	89	96	86	81	83	[illegible]	85	86	83	88	87	...	[illegible]
	Minimum	57	55	57	60	66	68	61	52	51	57	62	65	67	65	62	55	62	63	64	67	71	61	60	63	59	59	61	67	68	65	...	[illegible]
Ozark Plateau.																																	
Birchtree	Maximum	75	78	81	86	85	88	85	78	78	84	79	85	82	75	80	78	80	87	84	96	87	83	79	75	80	77	77	82	82	79	...	[illegible]
	Minimum	56	52	57	61	65	62	58	49	51	57	62	63	62	64	56	51	61	66	60	71	67	65	59	61	62	57	65	63	65	60	...	[illegible]
Cassville	Maximum	75	78	85	87	84	86	76	77	74	87	85	74	77	76	72	79	79	88	87	91	90	77	81	78	81	79	78	82	85	87	...	[illegible]
	Minimum	50	51	49	63	51	62	56	47	51	54	50	54	66	63	62	63	65	62	61	68	66	68	57	62	51	64	64	64	67	[illegible]	...	[illegible]
Duncan	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eldon	Maximum	76	81	83	87	90	87	79	71	77	87	83	79	85	70	81	83	81	84	82	80	84	82	81	81	84	83	80	83	86	73	...	[illegible]
	Minimum	51	52	58	65	65	64	51	45	51	58	61	67	59	56	49	51	57	61	61	64	66	57	53	62	62	60	65	67	64	55	...	[illegible]
Fruit City	Maximum	75	79	81	88	88	89	77	75	74	79	79	86	81	76	79	78	82	88	80	75	86	80	81	83	79	82	85	81	83	78	...	[illegible]
	Minimum	58	62	68	70	65	70	55	55	58	66	64	68	69	60	64	63	68	66	68	70	65	63	60	62	60	70	71	61	[illegible]	62	...	[illegible]
Gano	Maximum	71	81	84	88	89	89	78	75	86	89	78	89	77	80	82	82	83	85	85	86	82	83	83	78	82	84	81	80	83	82	...	[illegible]
	Minimum	56	55	56	63	65	64	54	46	53	58	63	65	60	61	55	51	58	60	61	68	61	63	55	61	62	56	63	65	66	59	...	[illegible]
Hollister	Maximum	80	86	88	90	88	90	70	88	96	80	82	90	88	76	82	80	82	88	90	96	94	82	82	78	82	78	82	86	88	88	...	[illegible]
	Minimum	50	54	56	62	66	64	68	60	62	50	65	56	60	62	58	56	64	66	70	74	70	72	70	66	62	64	60	60	[illegible]	[illegible]	...	[illegible]
Ironton §§	Maximum	75	80	84	88	89	90	78	75	80	87	80	90	85	78	82	81	83	88	83	88	83	83	81	70	81	85	75	82	83	83	...	[illegible]
	Minimum	57	48	62	59	63	63	66	45	48	52	65	62	70	65	58	53	55	67	59	72	67	62	53	61	64	53	67	66	68	65	...	[illegible]
Lebanon	Maximum	82	83	83	83	87	90	75	78	84	88	78	88	85	71	84	82	80	88	84	92	82	95	86	...	...	...	90	86	79	[illegible]	...	[illegible]
	Minimum	52	50	57	62	62	66	64	52	54	57	62	63	62	61	52	55	65	65	66	67	72	64	57	55	60	62	58	62	64	58	...	[illegible]
Mountain Grove	Maximum	74	76	86	84	86	87	76	75	77	84	73	83	76	74	80	78	78	85	84	89	83	81	77	75	77	76	79	81	82	78	...	[illegible]
	Minimum	54	54	60	65	67	66	60	48	51	58	61	61	63	61	53	57	62	65	61	72	74	64	57	63	61	59	62	62	64	60	...	[illegible]
Neosho	Maximum	77	81	87	88	87	86	85	76	82	88	87	87	75	77	82	82	82	88	88	92	91	82	84	83	85	83	82	82	86	81	...	[illegible]
	Minimum	51	51	60	64	66	66	57	46	50	62	61	65	62	63	48	67	60	68	64	64	69	68	59	64	66	64	63	60	61	61	...	[illegible]
Rolla	Maximum	75	82	85	88	92	89	66	75	79	82	80	89	75	68	83	81	83	84	85	87	79	80	85	76	89	86	82	79	87	74	...	[illegible]
	Minimum	56	54	51	65	65	70	63	46	52	56	63	64	61	59	50	57	60	61	60	65	67	60	56	63	62	60	64	66	62	60	...	[illegible]
Springfield	Maximum	73	75	81	84	83	83	64	71	76	86	75	86	75	68	77	77	77	85	83	90	79	78	77	76	77	73	76	79	86	80	...	[illegible]
	Minimum	57	59	62	69	68	61	54	50	57	63	61	66	59	59	54	60	65	68	66	74	70	67	62	63	62	62	66	64	64	58	...	[illegible]
Southwest Plain.																																	
Amoret	Maximum	77	78	82	86	83	85	79	79	79	93	89	87	85	73	82	85	79	87	87	85	86	84	84	85	85	83	85	86	90	90	...	[illegible]
	Minimum	52	52	63	62	64	65	52	48	51	62	61	67	59	55	50	59	60	61	64	61	61	61	60	64	63	65	66	60	63	61	...	[illegible]
Clinton	Maximum	80	84	83	88	90	92	75	78	79	90	86	92	80	74	77	87	81	87	84	83	85	84	83	85	82	85	85	89	94	83	...	[illegible]
	Minimum	51	60	60	65	64	60	53	48	52	62	67	72	49	57	49	59	60	60	64	63	62	61	58	64	62	62	57	64	68	60	...	[illegible]
Harrisonville §§	Maximum	74	78	80	84	85	84	70	77	76	89	78	87	74	64	83	82	75	81	87	74	83	81	82	82	84	84	79	80	84	72	...	[illegible]
	Minimum	53	50	55	64	65	67	55	55	56	53	54	62	62	56	49	53	62	63	65	61	61	61	60	65	65	64	67	65	65	60	...	[illegible]
Lamar §§	Maximum	76	81	83	87	86	85	68	76	81	89	83	69	75	73	70	84	79	86	84	93	82	83	85	84	85	79	80	83	87	82	...	[illegible]
	Minimum	54	53	58	64	67	66	60	47	56	56	62	63	62	62	49	59	65	64	68	64	68	67	63	61	64	65	66	63	63	65	...	[illegible]
Lamonte	Maximum	78	80	83	86	89	87	77	75	73	83	87	88	80	80	79	81	88	79	76	83	84	73	80	81	86	82	81	82	86	73	...	[illegible]
	Minimum	55	51	59	63	65	65	50	45	52	54	63	64	59	54	47	56	57	61	65	64	62	54	58	63	63	66	63	67	62	60	...	[illegible]
Marshall	Maximum	76	79	80	85	86	85	78	75	71	82	80	88	80	72	82	84	78	76	76	...	82	81	80	83	85	83	83	80	85	79	...	[illegible]
	Minimum	51	53	59	60	63	63	50	45	49	60	58	69	61	54	47	57	59	61	60	...	65	57	55	62	62	62	73	67	65	58	...	[illegible]
Warrensburg	Maximum	78	80	85	87	88	86	78	76	81	91	82	89	80	67	83	82	77	83	83	77	84	84	83	85	90	84	78	82	88	73	...	[illegible]
	Minimum	52	53	60	65	66	60	52	48	52	62	63	69	60	55	50	60	60	63	63	62	66	60	58	63	64	64	67	64	65	59	...	[illegible]
Warsaw	Maximum	76	81	84	90	92	90	83	76	79	91	83	91	82	70	82	83	79	84	83	82	82	80	82	82	85	84	86	82	86	87	...	[illegible]
	Minimum	49	50	59	66	64	67	54	45	53	64	63	70	62	59	50	60	60	62	63	65	68	66	57	65	62	63	67	65	63	61	...	[illegible]
Northwest Plateau.																																	
Avalon	Maximum	76	78	80	82	84	86	77	74	72	78	81	87	83	70	84	84	76	80	78	73	83	82	81	87	88	80	81	83	87	80	...	[illegible]
	Minimum	53	57	60	61	65	66	52	48	46	62	63	65	57	55	52	62	57	62	62	60	66	61	60	64	65	65	68	68	65	60	...	[illegible]
Grant City	Maximum	72	70	74	80	86	89	69	70	72	82	79	90	77	71	84	78	70	74	66	71	81	79	74	82	84	90	84	81	82	83	...	[illegible]
	Minimum	51	50	52	55	64	65	51	49	43	60	63	66	54	54	53	61	51	61	55	54	62	60	57	59	65	64	62	65	63	[illegible]	...	[illegible]
Kansas City	Maximum	74	76	77	83	84	80	66	75	71	86	75	87	74	67	81	81	72	82	76	72	81	81	78	83	85	81	78	83	85	72	...	[illegible]
	Minimum	54	58	63	67	67	63	52	54	52	62	63	69	57	54	55	64	61	64	62	60	66	63	64	65	67	68	68	66	64	58	...	[illegible]
Kidder §§	Maximum	73	75	76	81	82	79	62	72	68	80	77	85	79	65	78	79	72	75	68	72	79	78	78	82	84	83	81	79	83	79	...	[illegible]
	Minimum	51	57	61	66	65	65	50	48	46	62	63	67	57	54	53	64	55	65	62	58	65	61	62	61	65	66	66	67	64	62	...	[illegible]
Lexington	Maximum	77	78	80	83	85	81	68	77	71	85	79	87	72	60	81	82	75	79	74	74	83	84	82	85	86	83	81	82	88	77	...	[illegible]
	Minimum	49	54	62	68	65	65	51	49	49	62	64	69	58	55	51	61	60	62	63	60	66	58	59	62	63	65	68	66	65	61	...	[illegible]
Maryville §§	Maximum	76	78	76	84	87	81	67	72	72	81	82	90	72	75	86	79	68	78	69	74	83	85	81	85	91	89	87	85	86	81	...	[illegible]
	Minimum	48	52	56	61	62	62	49	48	41	48	61	64	53	53	51	59	51	53	59	53	58	59	52	58	60	63	63	63	60	58	...	[illegible]
Oregon	Maximum	71	74	75	81	82	77	66	71	69	79	79	84	69	73	80	76	70	77	71	69	79	80	78	81	85	82	81	81	82	79	...	[illegible]
	Minimum	50	51	60	64	63	63	49	48	44	60	62	66	54	53	54	60	54	60	59	55	62	60	59	59	62	65	64	62	61	58	...	[illegible]
St. Joseph	Maximum	75	77	80	78	88	86	71	73	68	74	79	89	79	65	80	80	75	79	74	78	82	79	79	81	82	84	80	72	83	79	...	[illegible]
	Minimum	56	54	[illegible]	61	68	68	49	46	50	60	63	69	61	54	50	63	60	62	58	61	67	60	55	66	64	64	68	66	66	64	...	[illegible]
Trenton	Maximum	72	76	76	82	86	83	76	75	72	81	80	86	80	68	80	79	75	75	71	74	81	77	81	82	87	82	83	82	83	83	...	[illegible]
	Minimum	56	57	66	66	65	66	50	49	45	60	64	65	58	55	53	62	55	63	61	57	65	61	59	63	65	65	66	67	64	60	...	[illegible]

1, 2, 3, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
No Rain
0
0.5
1
2
4
6
8
12

Y. S Black

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
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CLIMATOLOGICAL DATA

MISSOURI SECTION

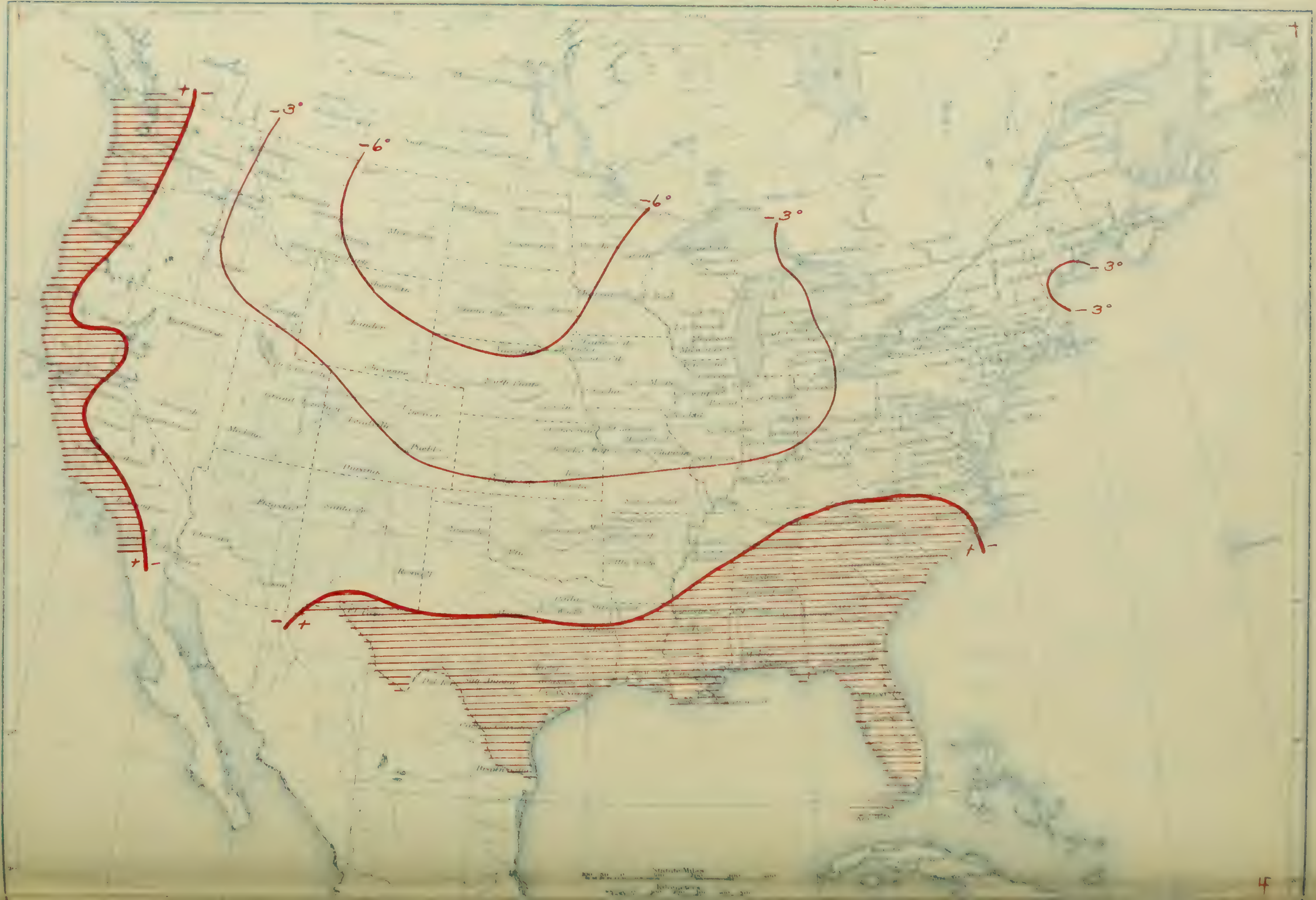
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JULY, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
AUGUST 26, 1915

Departure of the Mean Temperature from the Normal, July, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

l. XIX. Columbia, Mo., July, 1915. No. 7

GENERAL SUMMARY.

xcessive cloudiness, much rain, and uniformly low temper- res in all divisions except the southeast, flooded river bot- s, and a few severe local storms were the more marked fea- s of the weather for the month of July, 1915. Harvesting, shing, haying, and other farming operations were much fered with, and considerable grain was damaged.

e present month is the coolest of its name during the last years, but other Julys in previous years have been cooler. second decade was the warmest, when prevailing tempera- conditions were nearly normal, but the first and last dec- were cooler than normal, except the two or three final which were the warmest of the month. The extremes, 42° 102°, are not unusual.

e monthly rainfall was, for the State as a whole, above average, but it was unevenly distributed. In the Ozark au and southeastern lowlands it was deficient, while in r divisions it was heavy to excessive. The amount and ency in the northwest plateau was markedly unusual, the s being 11.79 inches. At Maryville, Nodaway County, the 20.22 inches for the month, is the heaviest ever recorded uly, the previous record being 18.30 inches, at Lexington, yette County. For the northwest plateau as a whole the ss since May 1st is 13.43 inches.

cal thunderstorms were frequent, and occasionally severe. most violent of these perhaps, occurred in St. Charles Coun- uring the afternoon of the 7th, and particularly at the vill- f St. Charles, Gilmore, Wentzville, St. Peters, and O'Fal- Much property, including buildings, trees and crops, were royed. It was reported that one person was killed at Wentz- , two at O'Fallon and one at Gilmore. There is some evi- e, although not convincing, that the storm was a tornado.

PRESSURE.

e atmospheric pressure during July differed but little from general arrangements and movements of the preceding two ths, that is, lows predominated and consequently there much cloudiness and rain. The mean sea-level pressure, 8 ons reporting, was 29.95 inches, or .03 inch below normal.

TEMPERATURE.

e monthly mean for the State, 65 stations reporting, was . The mean departure from the normal for 52 stations ng 10 or more years' record was minus 2.4°. The mean eratures and departures from the normal by divisions were llows: northeast plain, 73.8°, deficiency 3.4°; southeast ands, 78.2°, excess 0.1°; Ozark plateau, 75.3°, deficiency ; southwest plain, 75.0°, deficiency 2.7°, and northwest au, 72.5°, deficiency 3.8°. The highest local monthly was at Caruthersville, and the lowest was 70.5° at Unionville. highest temperature recorded was 102°, at Hollister on the and Sikeston on the 30th, and the lowest was 42°, at Cass- on the 6th. Temperatures of 90° or higher occurred on an ge of 8 days. 100° or higher occurred on several days at stations, all in the extreme southern or southeastern coun-

HUMIDITY.

e relative humidity averaged about 7 per cent above nor- in the western, and nearly 8 per cent above normal in the rn half of the State. At Columbia the hygregraph trace s only three days with the minimum, in the afternoon, be- 0 per cent.

PRECIPITATION.

The average precipitation, 80 stations reporting, was 6.05 inches. The departure from normal for 67 stations having 10 or more years' record was plus 1.59 inches. The average precipitation and departure from normal for each division were as follows: northeast plain, 6.19 inches, excess 2.37 inches; southeast lowlands, 3.84 inches, deficiency 0.75 inch; Ozark plateau, 3.12 inches, deficiency 1.52 inches; southwest plain, 5.63 inches, excess 0.92 inch, and northwest plateau, 11.79 inches, excess 6.95 inches. The greatest local monthly amount was 20.22 inches, at Maryville, and the least was 0.58 inch, at Houston. The greatest amount in any 24 consecutive hours was 6.77 inches, at Maryville.

The average number of days with 0.01 inch or more precipitation was 12.

WIND.

The prevailing winds were from the southwest. Strong, and in a few cases damaging, local winds occurred on several dates.

SUNSHINE AND CLOUDINESS.

Cloudiness was excessive except in the eastern Ozark region and southeast lowlands. The average number of hours of sunshine for the State was 288, which is about 10 per cent below normal. At Columbia the percentage of sunshine was 25 below normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—1st, 11th and 26th. Hail—18th and 31st. Halos, lunar—23rd. Halos, solar—12th, 14th, 16th, 27th and 29th. Thunderstorms—4th, 6th, 7th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th and 31st.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.96	90	......	227	50	4,507	6.1	31	ne	14
Hannibal	29.94	88	......	....	....	5,288	7.1	37	w	30
Kansas City	29.94	84	65	289	64	7,508	10.1	56	nw	18
St. Joseph	29.94	90	66	262	57	4,453	6.7	46	nw	18
St. Louis	29.95	84	70	307	68	8,052	10.8	42	nw	19
Springfield	29.98	83	61	338	76	6,259	8.4	44	s	12
Cairo, Ill	29.95	82	63	....	....	5,187	7.0	37	se	1
Keokuk, Iowa	29.95	87	68	315	71	4,305	5.8	30	n	18

COMPARATIVE DATA FOR JULY.

	Temperature				Precipitation				Number of Days			
YEAR	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	79.3	+2.3	111	50	3.31	−0.98	......	0	7	......	......	......
1889	77.1	+0.1	107	46	3.75	−0.54	......	0	8	......	......	......
1890	79.6	+2.6	106	52	2.98	−1.31	......	0	5	......	......	......
1891	72.7	−4.3	103	40	3.55	−0.74	......	0	8	......	......	......
1892	75.8	−1.2	101	45	4.99	+0.70	4.75	0	8	12	10	9
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	0	8	14	12	5
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	0	5	18	10	3
1895	74.4	−2.6	106	45	6.79	+2.50	6.52	0	10	10	12	9
1896	77.3	+0.3	108	48	5.87	+1.58	8.00	0	9	15	11	5
1897	78.7	+1.7	106	48	3.22	−1.07	4.05	0	6	19	9	3
1898	76.1	−0.9	104	42	5.58	+1.29	8.15	0	9	16	10	5
1899	76.0	−1.0	102	43	4.51	+0.22	4.48	0	9	15	11	5
1900	76.9	0.1	102	46	4.11	−0.18	7.03	0	8	17	10	4
1901	85.4	+8.4	116	46	2.02	−2.27	3.78	0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0	8	17	11	3
1903	77.4	+0.4	102	51	3.22	−1.07	3.26	0	8	17	10	4
1904	74.2	−2.8	100	47	4.65	+0.36	4.15	0	10	15	11	5
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	0	12	12	10	9
1906	74.7	−2.3	100	48	3.53	−0.76	4.46	0	8	17	10	4
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	0	8	19	8	4
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	0	8	18	9	4
1909	76.7	−0.3	102	41	6.41	+2.12	10.71	0	10	17	8	6
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	0	9	16	9	6
1911	78.0	+1.0	113	43	3.95	−0.34	4.20	0	8	16	9	6
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	0	7	18	9	4
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	0	7	18	9	4
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	0	7	17	9	5
1915	74.6	−2.4	102	42	6.05	+1.59	6.77	0	12	14	9	8

Climatological data for July, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	3.07	−1.29	0.82	0	11	12	1	18	sw	C. Randecker.
Brunswick	Chariton	652	36	72.8	−4.1	90	14	51	5	30	10.22	+5.62	2.15	0	16	7	5	19	nw	Louis Benecke.
Columbia	Boone	784	26	74.1	−3.3	93	30	50	5	27	3.55	−0.10	1.00	0	13	4	11	16	nw	U. S. Weather Burea
Fayette	Howard	725	31	....	.....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	73.6	−3.4	93	30	49	5	31	2.91	−1.76	0.63	0	13	16	0	15	s	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	6.01	+1.42	1.12	0	14	4	9	18	sw	J. W. Penham.
Hannibal	Marion	534	23	73.4	−4.0	92	14	52	5	25	9.00	+5.25	1.96	0	17	9	9	13	sw	U. S. Weather Burea
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	2.84	−1.18	0.55	0	15	10	9	12	sw	C. T. Maushund.
Jefferson City	Cole	628	30	75.0	−2.9	94	28	50	5	30	2.05	−1.68	0.61	0	12	17	0	14	w	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	7.47	......	2.63	0	12	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	73.3	−2.9	94	28	53	5†	30	7.69	+4.16	1.52	0	16	16	12	3	nw	J. T. Farrell
Macon	Macon	881	18	72.0	−5.1	90	14	50	3	28	10.97	+7.70	2.19	0	20	9	8	14	nw	John A. Cook.
Mexico	Audrain	797	38	74.2	−2.7	94	14	51	5	29	4.73	+0.68	1.37	0	17	8	5	18	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	75.2	−2.3	94	11†	51	5	31	6.42	+1.60	1.63	0	10	8	18	5	w	E. E. Steines.
Palmyra	Marion	652	4	73.0	.....	92	14	52	5	33	7.63	+3.95	1.86	0	19	7	8	16	nw	W. B. Markell.
St. Catherine	Linn	914	3	71.3	.....	86	14†	49	5	29	11.99	......	2.58	0	18	5	26	0	sw	L. D. Baker.
St. Charles	St. Charles	614	38	75.0	−2.4	99	26	50	5†	32	7.97	+4.43	2.13	0	11	13	11	7	sw	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	76.4	−2.7	94	15	55	5	27	6.02	+2.59	1.72	0	10	9	12	10	sw	U. S. Weather Burea
St. Louis (2)	......do	578	4	76.2	.....	94	14	55	5	27	5.91	......	1.56	0	12	10	17	4	w	St. Louis University.
Steffenville	Lewis	576	23	74.6	−2.8	94	31	49	5	32	11.84	+6.75	1.90	0	15	7	21	3	w	Frank Hall.
Unionville	Putnam	1,072	23	70.5	−6.4	89	17	50	3†	29	6.85	+2.47	1.26	0	18	11	0	20	sw	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	5.14	......	1.66	0	9	....	....	....		C. B. Ellis.
Warrenton	Warren	865	25	74.6	−3.0	94	28	52	5	27	5.96	+1.95	1.37	0	16	8	9	14	nw	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	5.80	......	2.40	0	8	25	5	1	w	D. L. Albert
Cardwell	Dunklin	225	5	....	.....	....	....	54	6	....	2.90	......	1.80	0	4	26	5	0	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	80.0	+0.2	90	30†	57	6	34	3.45	−0.25	0.88	0	6	28	3	0	sw	H. E. Averill.
Doniphan	Ripley	440	11	77.5	−0.3	101	30	51	5	34	2.55	−3.45	0.80	0	7	18	8	5	s	W. W. Martin
Jackson	Cape Girardeau	458	25	77.6	+1.1	99	29†	50	5	28	2.85	+0.05	1.68	0	11	13	7	11	s	L. M. Bean
Marble Hill	Bollinger	420	24	77.2	+0.1	100	29	49	5	35	3.92	−0.98	1.32	0	8	20	11	0	s	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	2.68	−1.67	1.10	0	6	23	3	5	se	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	5.30	......	1.80	0	7	12	0	19	s	Christian Seabaugh
Poplar Bluff	Butler	333	12	77.1	−1.5	99	31	51	5	35	4.81	+1.06	1.79	0	9	19	6	6	.....	M. S. Wisehart.
Sikeston	Scott	328	15	79.6	+1.6	102	30	55	5†	37	3.53	−0.80	2.00	0	8	15	13	3	sw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	78.1	−0.5	97	30	60	5	23	3.51	+0.06	2.00	0	8	11	14	6	s	U. S. Weather Burea
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	4.11	+0.75	0.87	0	9	20	4	7	s	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	4.48	−0.02	1.33	0	8	13	7	11	e	Mrs. Nellie V. House
Belle	Maries	1,000	24	....	.....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	A. J. Wofford.
Birchtree	Shannon	1,200	22	75.4^{b}	−0.8	97	29†	47	5	31	0.99	−3.80	0.44	5	4	28^{a}	2^{a}	0^{a}	s	V. H. Kirkendall.
Bolivar	Polk	1,020	28	76.1	−0.9	98	30	48	5	31	2.83	−1.07	0.89	0	8	21	9	1	sw	A. C. Fink.
Cassville ††	Barry	1,500	5	72.4	.....	94	28†	42	6	37	0.98	......	0.71	0	2	27	2	2	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	74.7	.....	95	30†	50	5†	25	6.73	......	1.59	0	9	22	7	2	n	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	75.0^{c}	−2.7	95	30	46	5	32	2.88	−1.49	1.23	0	7	23^{c}	1^{c}	4^{c}	sw	H. E. Dean.
Duncan	Webster	1,400	3	....	.....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	C. A. Mingus.
Eldon	Miller	934	15	74.8	.....	95	30	51	5†	34	2.71	−1.53	0.90	0	10	12	19	0	s	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	76.7	.....	93	15†	55	4	27	3.37	......	1.30	0	8	24	7	0	sw	R. C. Walton.
Gano ‡‡	Dent	1,250	12	75.2	−1.7	97	30	47	5	31	2.57	−1.83	1.01	0	9	19	10	2	sw	A. C. Leach.
Goodland	Iron	1,000	11	73.8	−0.3	96	31	43	5	35	2.18	−2.75	0.83	0	6	16	11	4	s	F. M. Adams.
Hollister	Taney	1,000	7	78.3	.....	102	29	56	4	34	1.21	−3.52	0.56	0	4	29	0	2	sw	W. P. Chapmann
Houston	Texas	1,280	23	75.2	−0.6	96	30	46	5	32	0.58	−4.18	0.33	0	3	20	11	0	sw	R. F. Harmon.
Ironton	Iron	925	38	75.0	−0.6	95	30†	43	5	34	4.61	+0.04	1.70	0	11	8	18	5	n	W. H. Delano.
Koshkonong	Oregon	911	15	77.4^{a}	−0.7	98	30	52	5	33	2.16	−2.16	0.95	0	7	19^{a}	8^{a}	3^{a}	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	76.4	−0.2	97	29	50	5	34	3.92	−0.76	1.60	0	7	16	8	7	w	O. L. Weissgerber.
Lockwood	Dade	1,088	21	75.3	−1.8	93	18†	50	5	28	3.86	−1.73	1.12	0	6	18	10	3	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	74.4	−1.7	96	30	45	5	31	2.26	−2.25	1.26	0	5	15	9	7	s	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	76.1	−1.8	97	30	47	5	36	5.79	+0.40	2.40	0	7	20	10	1	sw	J. R. White & Son.
Neosho	Newton	1,083	33	75.1	−2.3	93	13†	46	5†	33	2.90	−1.52	0.61	0	10	28	2	1	sw	W. O. Buck.
Rolla	Phelps	1,139	34	75.0	−2.2	94	11†	50	5	30	5.58	+1.44	2.42	0	12	13	12	6	sw	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	74.0	−2.4	92	30	51	5	27	1.82	−2.97	0.70	0	8	21	8	2	s	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	....	.....	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	75.8	.....	95	18	50	5	32	6.04	......	1.38	0	12	9	14	8	sw	Darby Fruit Farm.
Clinton	Henry	800	29	75.6	.....	95	30	50	5	37	5.88	+1.29	1.90	0	6	13	17	1	sw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	74.0	−3.4	93	18	49	5	30	6.67	+2.77	1.30	0	15	6	6	19	sw	A. J. Sharp.
Lamar	Barton	964	35	75.9	−2.2	95	18	49	5	31	3.35	−1.11	1.20	0	7	14	9	8	sw	E. H. Adams.
Lamonte	Pettis	863	27	73.4	.....	93	27†	48	5	32	4.93	+0.23	1.60	0	13	8	20	3	sw	J. Ed. Hall.
Marshall	Saline	779	25	74.1	−2.7	92	28	46	5	33	6.29	+1.86	2.74	0	9	14	12	5	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	....	.....	....	....	....	....	....	4.45	+0.57	1.15	0	10	18	6	7	sw	C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	5.11	+0.61	1.23	0	7	13^{c}	4^{c}	11^{c}	sw	W. E. Mathews
Warrensburg	Johnson	883	37	75.8	−2.8	96	30	51	5	31	6.17	+1.93	1.95	0	14	7	17	7	sw	Geo. H. Collins.
Warsaw	Benton	883	11	75.6	−2.6	67	18†	47	5	33	4.95	+0.10	1.33	0	11	11	20	0	w	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	8.14	......	2.48	0	14	10	6	15	sw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	73.8	−3.6	90	17†	53	3†	29	10.07	+5.59	4.56	0	14	13	14	4	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	72.1	−3.1	90	17	47	3	31	10.28	+5.58	3.45	0	14	7	12	12	nw	M. H. Moulton.
Chillicothe	Livingston	......	1	....	.....	....	....	....	....	....	11.32	+6.17	6.00	0	16	9	2	20	......	Hocey O. Dupy
Conception	Nodaway	982	31	71.1	−4.5	89	17	51	5	25	14.42	+10.38	5.15	0	17	7	20	4	se	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	71.1	−4.9	90	15	49	5	31	12.59	+7.57	2.75	0	18	13	8	10	nw	W. H. Campbell.
Kansas City	Jackson	963	27	74.6	−3.0	90	14	56	5	23	6.67	+1.83	1.55	0	16	9	15	7	s	U. S. Weather Bureau
Kidder	Caldwell	1,017	25	71.3	−5.2	87	15	52	5	25	10.55	+6.30	2.90	0	18	10	11	10	sw	J. F. Sharp.
Lexington	Lafayette	813	34	74.2	−2.3	91	11†	50	5	30	10.92	+5.82	2.48	0	16	9	2	20	s	J. W. Keithley.
Liberty	Clay	864	27	74.6	−2.7	92	17	50	5	32	9.62	+4.88	1.52	0	15	7	23	1	ne	W. C. Wilmott.
Maryville	Nodaway	1,160	25	71.6	−4.5	93	16	49	5	34	20.22	+14.66	6.77	0	21	12	0	19	e	J. R. Brink.
Oregon	Holt	1,113	60	70.5	−4.7	88	15	49	5	28	10.88	+6.33	2.60	0	13	11	16	4	nw	Tom Curry.
St. Joseph	Buchanan	967	44	73.3	.....	91	15	54	4	26	12.92	+8.94	3.36	0	17	10	10	11	nw	U. S. Weather Bureau
Tarkio	Atchison	1,150	4	71.5	.....	89	15	49	5	32	14.50	......	3.38	0	17	13	13	5	se	John F. Frazer.
Trenton	Grundy	812	21	73.4	−3.3	87	10†	54	4†	23	10.15	+6.33	5.26	0	16	11	5	15	sw	W. H. Estes.
State means and extremes		.....	.....	74.6	−2.4	102	29†	42	6	37	6.05	+1.59	6.77	0	12	14	9	8	sw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete report used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1

Daily precipitation for July, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
heast Plain.																																	
le	Missouri	.03	....	.27	T.	....	....	.30	.04	....	....	....	.20	.60	....	.25	....	....	....	.82	....	....	....	....	.26	....	....	....	....	....	.20	.10	3.07
ek	Grand	.42	....	.13	.05	....	....	.32	....	....	....	.03	1.83	.49	.65	.81	....	....	....	.33	T.	....	....	....	.57	....	.55	.85	....	.25	2.15	.79	10.22
a***	Missouri	....	.07	....	.01	....	....	.44	....	T.	.02	.04	1.00	.11	.42	.04	T.	....	.32	....	....	....	....	....	.09	T.	....	....	....	T.	.58	.41	3.55
	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	do	....	.03	....	.15	....	....	.48	....	....	....	.43	.63	....	.45	....	.09	....	.34	.04	....	....	....	....	....	....	....	.03	....	.01	.22	.01	2.91
	Mississippi	.13	.11	....	.13	....	....	1.03	....	T.	.32	....	.30	....	.69	....	....	....	1.12	....	....	....	....	....	.92	.01	....	.30	.19	.50	.26	....	6.01
al***	do	.08	.03	....	.19	....	....	1.85	....	T.	1.96	T.	.81	.19	.31	.01	....	....	.45	....	....	....	....	....	.46	.12	.02	.15	.26	.46	1.65	....	9.00
n	Missouri	.01	....	.05	.26	.14	....	.26	.55	....	.01	.34	.22	.23	.02	....	....	.04	....	.34	....	....	....	....	....	T.	T.	....	.24	....	.13	....	2.84
City	do	.07	....	.08	....	.03	....	.38	.05	....	....	....	....	.18	....	....	....	.18	....	.27	....	....	....	....	.05	....	.03	....	....	....	.61	.12	2.05
ille	Chariton	....	.10	....	....	....	....	.45	....	.01	.05	....	2.63	.08	.64	....	....	....	.38	....	....	....	....	....	.85	.45	.25	....	....	....	1.58	....	7.47
m	Mississippi	.07	.29	....	.60	....	....	.62	....	....	.64	1.52	.95	.99	.22	.02	....	....	.24	....	....	....	....	....	.12	.28	....	....	....	.34	.36	.43	7.69
	Chariton	.20	.04	.09	.28	....	.31	....	....	....	.22	2.09	2.19	.31	.83	.27	.07	T.	.26	.30	....	....	....	....	1.25	....	.32	.70	....	1.00	.10	.14	10.97
	Mississippi	.02	.01	.01	.15	T.	....	.13	.69	....	....	.50	1.37	.30	.36	.57	....	....	....	.32	....	....	....	....	.04	.02	T.	....	T.	.03	.05	.16	4.73
	Meramec	T.	.15	.09	.41	....	....	1.06	T.	....	T.	.90	.63	....	....	....	....	T.	.18	....	....	....	T.	....	....	T.	....	.35	....	....	1.02	1.63	6.42
	Mississippi	T.	.06	.03	.32	....	....	.38	.06	....	.12	1.86	1.24	.07	.14	.13	....	....	.08	.26	....	....	....	....	.56	....	.12	.42	T.	.78	.09	.86	7.63
rine	Grand	.80	.10	....	.06	....	....	.29	....	T.	.84	.51	2.58	1.04	1.23	.24	....	....	.18	.05	....	....	....	....	.63	.82	T.	1.38	.03	.77	.44	T.	11.99
les.	Missouri	.06	1.25	....	.44	....	....	2.13	....	.60	....	.90	1.52	....	....	....	T.	....	.47	....	....	....	.16	....	....	....	....	.10	....	....	.34	....	7.97
(1)***	Mississippi	T.	.06	....	.35	....	....	1.43	T.	....	.06	.42	.12	....	....	T.	.08	....	1.62	....	....	....	....	....	T.	T.	....	....	....	....	1.72	.16	6.02
(2)	do	.02	.10	....	.31	....	....	1.51	.01	....	.13	.53	.27	....	....	T.	.03	....	1.56	....	....	....	T.	....	....	T.	....	T.	....	....	1.25	.19	5.91
ile	do	.66	....	.05	.50	....	....	.20	....	T.	.88	1.90	1.62	....	1.09	.23	....	....	.61	....	....	T.	....	....	.95	1.52	....	.63	T.	.30	.70	....	11.84
lle	Grand	.10	.32	....	.25	....	....	.34	T.	....	.08	.35	.55	.20	1.10	.16	T.	T.	.70	.66	....	....	....	....	.26	.10	....	.20	.12	.60	....	.76	6.85
a	Mississippi	....	....	....	.53	.10	.15	....	....	....	.33	1.22	1.66	.32	....	....	....	....	.50	....	....	....	....	....	....	....	....	....	.33	....	....	....	5.14
ons	do	.01	....	.11	.29	.02	....	.35	1.07	....	.02	1.37	.65	.14	.23	....	....	.01	....	.05	....	....	....	....	....	....	....	....	.15	....	.50	.99	5.96
st Lowlands.																																	
rardeau	Mississippi	.05	....	.50	....	.45	....	....	2.40	....	.10	.80	.90	....	....	....	....	....	.60	....	....	....	....	....	....	....	....	....	....	....	....	....	5.80
l	do	1.80	....	.80	.12	....	....	....	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.90
sville	do	.88	....	.60	.85	....	....	....	.85	....	....	....	.13	....	....	....	....	.14	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	3.45
n	Black	.60	....	....	.47	....	....	....	.30	.15	....	....	.20	....	....	....	....	....	.03	.80	....	....	....	....	....	....	....	T.	....	....	....	....	2.55
	Mississippi	....	.20	....	.29	....	....	1.68	....	....	.06	.58	....	....	....	.22	.20	.02	.50	....	....	....	....	....	....	....	....	....	....	.03	....	.04	3.82
ill	do	....	....	....	.78	....	....	....	.49	....	....	.40	....	....	....	.05	....	....	.50	.12	....	....	....	....	....	....	....	....	....	1.32	.26	....	3.92
drid	do	.50	....	.63	....	.05	....	....	1.10	....	....	....	....	....	....	....	....	....	.20	.20	....	....	....	....	....	....	....	....	....	....	....	....	2.68
near)	do	....	....	.30	.30	....	....	.50	....	....	....	....	....	....	....	....	....	....	1.80	....	....	....	....	....	....	....	....	....	....	.30	.30	1.80	5.30
Bluff	Black	.35	....	.43	....	.03	....	....	.83	....	.03	....	....	.27	....	....	....	....	1.79	.93	.15	....	....	....	....	....	....	....	....	....	....	....	4.81
	Mississippi	.25	....	.32	.10	....	....	....	.61	....	.01	....	....	....	....	....	....	.16	2.00	.08	....	....	....	....	....	....	....	....	....	....	....	....	3.53
**	do	.15	T.	.24	.19	....	....	2.00	....	....	....	.78	....	T.	....	....	....	.02	.11	T	....	....	....	....	....	....	....	T.	....	T.	....	.02	3.51
Plateau.																																	
n	Gasconade	.40	....	.42	.72	.12	....	....	.22	....	....	....	....	.42	....	....	....	.87	....	.82	....	....	....	....	....	....	....	....	....	....	.12	....	4.11
	Osage	.38	....	T.	.44	.20	....	.65	.45	....	....	....	....	.80	....	....	....	....	....	1.33	....	....	....	....	....	....	....	....	....	T.	.23	....	4.48
	Meramec	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Black	.17	....	....	....	....	....	....	.44	....	....	....	.14	....	....	....	....	....	....	.24	....	....	....	....	....	....	....	....	....	....	....	....	0.99
	Osage	.58	.01	....	.20	....	....	.38	....	....	....	....	.89	....	....	....	....	.15	....	.45	....	....	....	....	....	....	....	....	....	T.	....	.17	2.83
	White	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.27	....	.71	....	....	....	....	....	....	....	....	....	....	....	....	0.98
	Gasconade	1.59	.50	.46	.80	....	.20	....	....	....	....	....	.90	....	....	....	....	1.32	.93	....	....	....	....	....	....	....	....	....	....	....	....	.03	6.73
	Neosho	....	.11	....	.39	.01	....	....	....	.35	....	....	....	....	....	....	....	.58	....	1.23	....	....	....	....	....	....	....	....	....	....	....	.21	2.88
	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	do	....	.12	....	.30	....	....	.45	.02	....	....	....	.90	....	....	....	....	.40	.35	.05	....	....	....	....	.02	....	....	....	....	....	....	.10	2.71
	Black	....	....	....	.23	....	....	....	.11	.05	....	....	.30	....	....	....	....	....	1.30	....	....	....	....	....	....	....	....	....	....	1.30	.04	.04	3.37
	Meramec	.42	....	.02	.26	....	....	.30	....	....	....	.25	.20	T.	....	....	....	.05	1.01	....	....	....	....	....	....	....	....	....	....	.06	....	....	2.57
l	Black	.13	....	....	.20	....	....	....	.25	....	....	....	.64	....	....	....	....	....	.83	.13	....	....	....	....	....	....	....	....	....	....	....	....	2.18
	White	.56	.10	....	....	....	....	....	.15	....	....	....	....	....	....	....	....	....	....	.40	....	....	....	....	....	....	....	....	....	....	....	....	1.21
	Gasconade	....	T.	....	.10	....	....	T.	....	T.	....	....	.33	.15	....	....	....	....	T	....	....	....	....	....	....	....	....	....	....	....	....	T.	0.58
	Mississippi	.03	....	T.	....	.30	....	....	.55	....	.24	.37	T.	.30	....	....	....	.02	.08	1.70	....	....	....	....	....	....	....	....	.02	....	1.00	....	4.61
ong	Black	.76	....	.07	.15	....	....	....	.13	.06	....	....	.04	....	....	....	....	....	....	.95	....	....	....	....	....	....	....	....	....	....	....	....	2.16
	Osage	1.60	....	....	.46	....	....	....	.06	....	....	....	....	1.10	....	....	....	.05	....	.25	....	....	....	....	....	....	....	....	....	....	.40	....	3.92
d	do	1.03	....	.18	....	....	....	....	....	.48	T.	....	....	....	....	....	....	.12	.93	....	....	....	....	....	....	....	....	....	....	T.	....	1.12	3.86
Grove	White	.48	....	....	....	T.	....	....	....	....	....	....	....	1.26	.26	....	....	....	.11	.15	....	....	....	....	....	....	....	....	....	....	....	....	2.26
ernon	Neosho	.85	T.	....	.24	....	....	....	....	.41	T.	....	.64	....	....	....	....	2.40	....	.25	....	....	....	....	....	....	....	....	....	....	....	1.00	5.79
	do	.61	.01	....	.27	....	T.	T.	.01	.33	....	....	.06	....	....	....	....	.20	....	.58	....	....	....	....	....	....	....	....	....	.28	....	.55	2.90
	Meramec	.40	....	.43	.67	.09	....	....	.36	....	.06	.03	....	.19	....	....	....	.43	.29	2.42	....	....	....	....	....	....	....	....	....	....	.01	....	5.58
ld***	White	....	.02	....	.18	....	....	.06	....	.01	T.	....	.70	T.	....	....	....	.19	.65	.01	....	....	....	....	....	T.	....	....	....	T.	....	....	1.82
nd	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
st Plain.																																	
	Osage	.58	.78	.01	.05	....	....	1.04	.13	....	....	....	1.38	....	.08	.20	....	T.	....	.83	....	....	....	.23	....	T.	....	....	....	T.	....	.73	6.04
	do	.40	.67	....	....	....	.64	....	....	....	....	....	1.90	....	....	....	....	....	....	.77	....	....	....	....	....	....	....	....	....	....	....	1.50	5.88
ville	do	1.03	....	.17	....	....	....	1.30	....	....	.02	.06	1.00	1.15	....	.41	.01	....	....	1.00	....	....	....	.09	.11	....	....	....	....	.15	.05	.12	6.67
	Neosho	.56	....	T.	.25	....	....	.12	T.	.25	T.	....	....	.53	....	....	....	.44	T.	1.20	....	....	....	....	....	....	....	....	....	T.	T.	....	3.35
	Missouri	.25	.20	....	....	....	....	.43	....	....	T.	.10	1.60	.10	.20	.05	....	....	.75	.40	....	....	....	....	.50	....	....	....	....	T.	.10	.25	4.93
	do	T.	.20	....	....	....	....	.28	....	....	....	.31	2.74	T.	T.	.37	....	....	T.	.76	....	....	....	.63	....	....	....	T.	....	T.	.85	.15	6.29
	Osage	....	.03	....	1.15	.25	....	.86	....	.20	....	....	.47	....	....	.25	....	.52	....	.60	....	....	....	....	....	....	....	....	.12	....	....	....	4.45
	do	1.02	....	....	.79	....	....	.80	....	....	....	....	1.23	....	....	....	....	.44	....	.71	....	....	....	....	....	....	....	....	....	....	....	.12	5.11
burg	Missouri	.42	.21	.02	....	....	....	.75	....	T.	....	.03	1.95	.08	.23	.02	T.	.01	....	1.22	....	....	....	....	.95	T.	....	....	....	T.	.03	.25	6.17
	Osage	.23	1.20	....	.23	....	....	.80	....	.05	....	....	1.33	....	....	....	.03	.15	....	.53	.03	....	....	....	T.	....	....	....	....	T.	....	.37	4.95
	Missouri	.07	....	.02	....	....	....	.17	....	....	....	....	2.48	.18	.27	.49	.04	....	....	1.82	....	....	....	....	.67	....	.05	.42	....	.28	1.18	....	8.14
st Plateau.																																	
	Grand	....	.12	....	.03	....	....	.45	....	....	.18	....	4.56	.85	.40	.35	....	....	....	.40	....	....	....	.50	.30	....	....	....	.75	....	1.15	.03	10.07
	do	1.31	.13	T.	.16	....	....	.95	T.	T.	.33	....	3.45	T.	1.47	....	.50	....	.16	T.	T.	....	....	T.	.20	.30	T.	.22	.60	T.	.50	....	10.28
e	do	.35	....	....	.10	....	....	.36	.03	....	....	.55	6.00	.15	1.17	.40	.05	....	....	.27	....	....	....	....	.30	....	.32	.34	....	.30	.63	....	11.32
on	Missouri	.31	.24	.15	.35	....	....	1.66	....	T.	.50	....	2.40	.16	5.15	....	1.18	....	.32	....	.03	....	....	.16	.08	.15	T	T.	.69	....	.89	....	14.42
y	Grand	.94	.15	.29	.23	....	....	1.20	T.	.10	.33	T.	2.75	.51	2.20	....	1.09	....	T.	T.	....	T.	....	.10	.26	.45	.06	.12	1.37	T.	.54	....	12.69
ity***	Missouri	....	.04	....	.01	....	....	.35	....	....	....	....	1.02	.74	.54	.21	.25	....	.78	.10	....	....	....	.61	1.15	.07	.12	....	.25	....	.43	....	6.67
	Grand	.90	....	.03	.03	....	....	.40	.04	....	....	.40	2.90	.02	1.70	.40	.47	....	....	.68	.02	....	....	....	.38	....	.30	.88	....	.35	.65	....	10.55
	Missouri	.22	....	.06	....	....	....	.27	.02	....	....	....	2.00	.90	.36	2.48	....	....	....	2.00	....	....	....	....	.38	.07	.27	.09	....	1.14	.46	.20	10.92
	do	.52	.05	....	T.	....	....	.37	....	T.	T.	....	1.48	.65	1.30	.37	.35	....	....	.50	....	....	....	.15	1.52	.18	.86	....	.10	....	1.22	....	9.62
	do	2.07	....	.39	.35	....	....	1.54	.04	....	.78	.05	2.80	.08	6.77	.33	1.38	....	....	.58	....	....	....	.60	.24	.24	....	.08	.95	.24	.65	.06	20.22
	do	....	.47	....	.14	....	....	.38	....	....	.44	....	2.60	.22	1.47	....	.98	....	.44	....	....	....	....	....	2.45	....	.02	....	.45	....	.82	....	10.88
***	Missouri	....	.01	....	.06	....	T.	.31	....	.01	.36	.34	2.02	3.36	.37	....	.44	....	.63	T.	....	T.	....	.63	1.39	....	1.68	T.	.44	....	.46	.41	12.92
	do	....	.35	.03	.44	....	....	.66	....	.09	1.14	....	2.39	.04	3.38	....	1.30	....	.88	....	....	....	....	....	1.16	.94	.03	.07	.38	....	1.22	....	14.50
	Grand	T.	.03	.14	....	....	.32	.12	....	T.	.55	5.26	T.	.62	.84	.11	....	....	.12	....	....	T.	....	.04	.05	.82	.39	T.	.20	.54	....	....	10.15

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ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the bservation.

recipitation measured in the morning; amount then recorded is for the preceding 24 hours.

race, or less than 0.01 inch.

Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

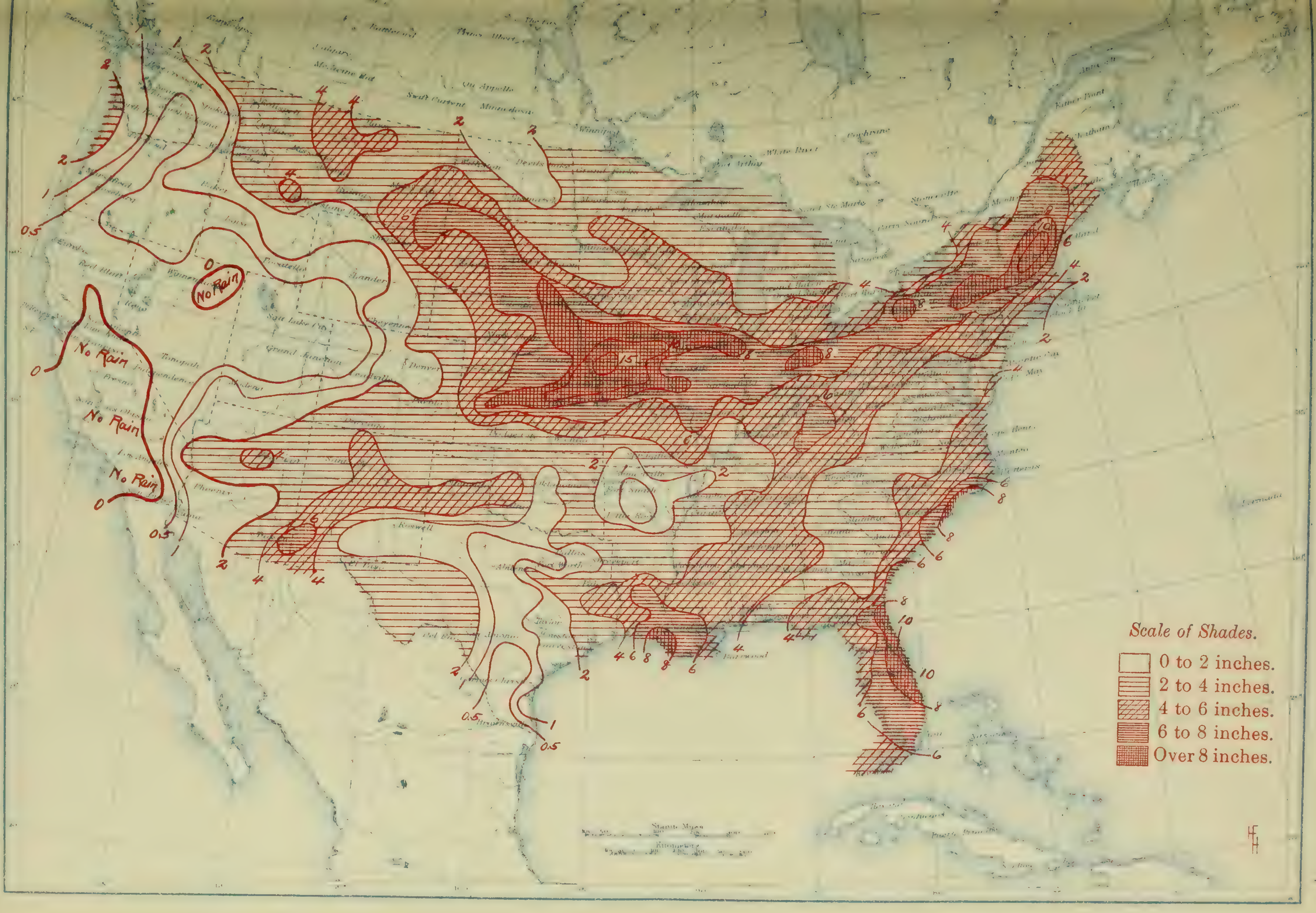
ecipitation in the next following measurement.

parate dates of fall not recorded.

Daily temperatures for July, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	80	72	77	71	78	81	82	71	78	81	87	80	86	90	87	83	88	79	73	77	79	81	81	82	75	84	88	87	84	87	[illegible]
	Minimum	60	61	52	55	51	51	59	65	59	60	73	68	68	66	70	72	69	70	68	61	59	62	58	63	65	64	65	64	73	75	[illegible]
Columbia	Maximum	80	76	77	70	77	81	85	72	79	90	89	81	89	92	90	85	89	86	81	77	78	86	84	80	80	87	91	92	85	93	[illegible]
	Minimum	59	59	51	57	50	58	66	61	59	71	74	69	69	71	71	72	72	68	68	62	56	56	55	66	68	66	64	66	74	72	72
Fayette	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hannibal	Maximum	80	77	78	70	76	80	82	75	77	81	88	83	88	92	90	84	89	78	81	76	78	80	83	82	78	82	88	84	86	88	[illegible]
	Minimum	61	59	54	51	52	57	65	62	60	64	76	68	67	70	72	71	69	68	69	62	57	59	58	64	68	66	64	75	72	69	[illegible]
Jefferson City §§	Maximum	80	80	78	72	80	80	87	74	81	89	93	80	90	92	88	88	92	86	82	78	78	81	85	81	88	90	93	94	88	93	[illegible]
	Minimum	58	60	55	61	50	58	63	65	59	63	75	70	68	70	70	71	70	72	67	65	60	58	58	63	65	65	68	73	74	71	72
Macon §§	Maximum	80	76	78	69	77	81	83	76	78	86	87	82	86	90	86	82	88	78	81	76	79	82	82	83	75	85	85	88	84	83	88
	Minimum	59	60	50	55	51	51	61	63	58	63	67	68	66	66	69	69	65	65	65	58	56	56	58	63	66	63	64	69	71	68	[illegible]
Mexico §§	Maximum	81	82	80	74	80	81	83	74	79	89	92	81	89	94	91	87	91	83	83	78	81	82	85	82	82	87	93	95	90	93	[illegible]
	Minimum	60	60	53	56	51	57	60	63	58	61	65	67	66	69	70	72	68	71	68	61	58	57	56	57	65	66	69	69	70	70	[illegible]
Oakfield	Maximum	77	85	77	71	78	79	85	73	79	90	94	85	89	92	94	93	90	88	85	78	80	82	85	82	90	88	92	93	92	90	92
	Minimum	61	62	57	59	51	56	65	62	60	68	63	68	68	70	71	74	73	70	67	61	57	56	66	65	67	68	70	70	77	73	68
St. Catharine	Maximum	78	74	76	70	78	79	79	80	75	83	83	79	81	86	81	80	85	80	77	75	77	80	80	81	76	80	82	82	84	84	[illegible]
	Minimum	60	60	52	55	49	52	55	66	59	68	68	65	66	67	69	69	70	64	65	58	56	58	58	62	63	64	67	71	71	74	67
St. Louis (1)	Maximum	78	82	79	71	77	80	83	71	81	88	92	81	88	93	94	92	89	90	85	79	86	86	83	82	88	84	92	93	[illegible]	[illegible]	[illegible]
	Minimum	64	64	62	60	55	62	65	64	63	65	65	69	72	74	77	78	76	68	71	66	62	64	67	69	72	72	73	72	78	75	72
Unionville §§	Maximum	80	73	76	68	76	81	80	78	72	85	88	85	86	85	87	86	89	76	78	76	80	83	82	80	76	78	83	80	86	82	87
	Minimum	59	60	50	52	50	52	60	61	56	69	64	66	64	66	68	67	64	62	64	55	53	54	56	60	62	60	62	66	64	65	62
Warrenton §§	Maximum	78	82	79	73	79	82	80	71	80	88	92	81	89	93	92	91	91	86	82	77	79	82	86	81	86	89	93	94	90	95	[illegible]
	Minimum	60	61	55	60	52	56	63	63	59	64	61	67	67	73	71	73	71	70	68	63	56	57	59	65	65	66	68	67	75	70	72
Southeast Lowlands.																																
Cardwell	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	[illegible]
	Minimum	60	70	80	64	60	51	58	64	64	66	67	67	68	70	69	68	67	65	60	58	59	60	60	58	61	64	70	70	71	73	[illegible]
Caruthersville	Maximum	85	85	83	85	82	85	92	89	87	94	94	91	92	96	95	96	96	96	92	89	85	86	88	90	94	95	95	[illegible]	98	90	[illegible]
	Minimum	64	64	65	67	58	57	66	70	67	74	76	76	72	75	75	71	73	73	71	74	63	60	59	60	62	66	70	72	[illegible]	75	[illegible]
Doniphan	Maximum	83	84	82	80	80	82	90	87	84	92	94	90	95	94	95	97	96	95	90	84	81	84	85	86	96	96	95	95	[illegible]	101	[illegible]
	Minimum	61	59	64	65	51	53	65	70	64	68	74	74	68	72	71	65	70	72	68	71	57	55	56	56	66	61	66	[illegible]	[illegible]	70	71
Jackson	Maximum	86	87	84	84	78	80	91	88	84	91	92	92	93	96	96	99	95	95	85	84	78	85	87	87	92	94	96	97	[illegible]	[illegible]	[illegible]
	Minimum	75	59	63	61	50	53	53	66	60	69	66	74	70	75	73	71	72	68	68	65	58	57	57	58	62	67	67	[illegible]	72	71	72
Marble Hill	Maximum	83	87	86	85	79	81	90	85	80	91	94	93	91	95	95	97	93	96	93	85	85	86	[illegible]	[illegible]	93	95	98	99	[illegible]	96	95
	Minimum	57	57	58	67	49	50	65	67	59	59	68	68	69	72	73	61	72	68	67	63	59	55	55	56	59	64	67	67	72	[illegible]	74
Poplar Bluff §§	Maximum	87	89	86	81	81	80	83	92	88	84	93	95	88	93	95	95	96	95	95	91	86	83	81	86	88	91	93	96	95	97	99
	Minimum	67	54	63	62	51	53	59	67	61	64	71	75	69	71	72	67	67	70	68	69	57	57	55	58	60	63	65	67	68	70	71
Ozark Plateau.																																
Birchtree	Maximum	79	80	78	76	77	77	....	89	83	92	....	87	92	90	92	93	89	93	86	80	81	83	81	85	89	93	94	94	97	97	[illegible]
	Minimum	61	60	61	61	47	53	....	64	60	73	....	67	67	72	69	70	69	67	65	66	55	56	54	57	65	62	68	67	70	69	70
Cassville	Maximum	75	75	74	72	74	79	87	87	80	91	79	80	92	91	91	90	86	93	82	72	78	81	85	84	89	89	92	94	93	94	88
	Minimum	50	54	53	57	57	42	66	59	65	62	69	71	67	70	63	65	66	65	64	48	58	63	59	64	57	57	54	57	60	68	64
Duncan	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eldon	Maximum	81	81	78	73	80	85	85	79	85	90	92	86	90	91	89	94	94	93	84	79	81	84	82	82	87	90	92	93	89	95	95
	Minimum	58	60	54	56	51	51	64	54	59	69	72	67	67	68	69	69	66	68	65	63	55	56	57	62	64	66	67	68	70	71	70
Fruit City	Maximum	79	82	76	76	78	77	88	83	90	90	92	85	90	92	93	93	89	93	85	79	78	79	81	83	88	90	92	92	93	93	92
	Minimum	64	64	65	55	60	64	70	62	68	70	70	68	71	75	74	76	65	75	67	63	58	59	68	66	71	[illegible]	71	71	67	67	75
Gano	Maximum	76	84	79	71	78	79	88	77	82	90	94	87	93	93	93	91	89	95	85	79	78	81	86	87	88	91	92	95	93	97	94
	Minimum	57	60	58	58	47	53	65	63	56	69	70	67	67	73	71	72	69	68	66	64	54	54	55	61	66	68	67	69	72	70	71
Hollister	Maximum	84	84	86	76	80	84	88	90	92	90	96	88	98	94	98	96	90	96	88	90	78	84	86	90	94	92	98	100	102	100	[illegible]
	Minimum	66	62	58	56	58	60	64	66	68	70	68	70	74	72	68	70	76	70	68	68	66	62	66	58	65	62	66	68	70	68	70
Ironton §§	Maximum	78	84	79	76	77	80	90	76	81	92	93	83	90	93	93	93	90	94	87	82	80	85	86	86	90	90	93	93	94	95	95
	Minimum	58	55	62	55	43	47	66	62	57	65	70	73	67	70	72	73	70	67	67	68	53	52	53	55	65	67	64	65	70	70	[illegible]
Lebanon §§	Maximum	82	82	83	75	83	80	90	81	86	90	95	85	95	93	89	91	93	98	86	82	80	85	87	89	91	91	96	96	97	95	[illegible]
	Minimum	58	58	60	60	50	57	62	68	62	64	74	75	68	73	70	74	70	72	68	65	53	54	53	60	65	70	72	68	70	70	69
Mountain Grove §§	Maximum	78	77	79	74	76	77	87	83	90	88	91	78	93	88	91	89	84	91	84	78	77	81	82	86	88	90	92	93	95	96	94
	Minimum	57	59	60	60	45	54	62	62	61	64	70	71	68	71	69	71	70	68	64	65	54	52	53	60	61	64	68	68	71	72	[illegible]
Neosho	Maximum	80	79	79	79	77	82	90	88	83	89	92	90	93	91	91	89	93	93	[illegible]	79	78	81	85	86	88	89	92	93	92	93	93
	Minimum	59	57	57	61	46	52	70	60	65	70	74	72	70	70	71	71	69	72	65	67	46	51	54	60	60	62	61	66	69	69	[illegible]
Rolla §§	Maximum	78	82	79	71	77	81	89	74	83	88	94	78	93	93	93	92	90	89	83	78	77	83	85	85	88	92	92	94	92	96	94
	Minimum	59	59	56	58	50	51	60	64	59	62	72	71	68	73	71	71	69	69	66	65	56	57	57	59	65	70	67	70	73	73	71
Springfield	Maximum	76	77	74	69	75	78	87	82	77	86	90	80	91	89	90	86	82	91	76	73	75	78	81	84	86	86	[illegible]	89	91	92	88
	Minimum	58	61	56	55	51	58	68	65	65	71	73	65	71	72	71	71	71	64	64	61	55	59	61	63	67	70	69	70	75	75	70
Southwest Plain.																																
Amoret	Maximum	84	84	79	78	82	84	86	86	81	91	93	90	93	91	91	90	91	95	85	84	83	86	85	84	86	89	91	92	90	94	93
	Minimum	55	61	52	51	50	56	65	63	60	69	72	66	71	70	67	70	68	72	64	62	60	56	64	66	61	67	67	67	69	73	[illegible]
Clinton	Maximum	88	82	79	76	83	81	90	82	87	93	93	91	89	93	90	90	92	94	90	84	86	80	87	87	85	90	94	93	89	95	87
	Minimum	55	59	54	59	50	55	55	65	63	69	75	69	72	72	70	70	70	75	60	68	56	52	57	...	...	68	...	...	70	...	...
Harrisonville §§	Maximum	79	73	79	70	79	83	83	75	82	90	91	84	87	92	87	85	89	93	79	76	77	81	85	85	71	87	90	92	85	92	82
	Minimum	55	60	52	58	49	55	64	68	63	64	73	70	68	69	70	70	70	72	65	62	58	57	61	62	66	67	67	68	72	72	71
Lamar §§	Maximum	80	80	79	72	80	82	90	86	81	90	92	89	94	93	90	92	91	95	80	78	80	84	86	86	88	91	92	92	91	94	93
	Minimum	57	61	54	55	49	56	63	64	66	67	73	75	69	72	74	72	71	71	65	66	57	56	58	62	65	68	68	68	70	72	71
Lamonte	Maximum	81	73	72	73	80	83	76	73	79	89	92	85	90	91	89	87	92	87	79	76	78	83	84	84	77	81	93	91	89	93	89
	Minimum	56	50	50	51	48	56	61	64	64	71	73	66	73	69	71	71	68	64	61	61	55	54	55	68	63	66	68	67	73	71	71
Marshall	Maximum	80	79	79	75	79	82	87	79	81	90	90	85	87	91	90	83	90	85	80	77	82	84	83	79	79	85	91	92	87	91	89
	Minimum	....	61	51	57	46	52	62	64	59	67	73	65	59	69	69	71	75	70	68	61	56	56	64	64	64	66	68	67	73	71	71
Warrensburg	Maximum	82	79	82	73	82	86	84	81	84	92	93	87	92	94	91	88	94	91	81	79	81	84	88	92	81	91	93	95	90	96	[illegible]
	Minimum	55	61	53	58	51	57	64	66	60	65	75	67	71	69	70	71	69	73	65	61	57	58	59	66	67	64	66	69	71	73	71
Warsaw	Maximum	81	80	78	72	80	83	89	80	85	91	94	85	92	94	91	88	92	97	82	77	79	82	86	87	87	91	93	94	90	97	92
	Minimum	57	59	52	59	47	53	65	67	63	69	75	69	72	73	71	70	70	72	66	64	54	56	54	64	61	67	63	65	73	73	72
Northwest Plateau.																																
Avalon	Maximum	82	73	80	71	82	82	83	77	79	89	88	84	84	89	87	84	90	85	80	78	83	84	[illegible]	85	79	86	90	89	89	89	86
	Minimum	61	60	53	56	53	57	67	65	60	69	68	62	60	64	68	69	70	64	62	57	58	68	68	70	70	70	68	70	70	72	73
Grant City	Maximum	81	72	79	72	80	82	78	76	69	86	82	86	83	80	90	86	88	80	77	75	79	84	85	86	76	71	83	82	76	81	86
	Minimum	59	57	58	54	49	54	56	52	60	65	64	63	68	66	67	66	63	63	65	57	57	57	62	65	62	61	67	68	68	68	65
Kansas City	Maximum	81	72	78	70	79	82	82	72	84	89	89	83	85	90	88	84	89	85	80	76	80	81	84	86	79	84	87	87	86	87	[illegible]
	Minimum	58	63	58	57	56	61	66	65	62	72	75	67	69	71	70	67	74	65	69	63	62	62	63	66	70	69	70	73	72	70	74
Kidder §§	Maximum	78	68	75	67	76	81	77	71	79	86	83	81	80	81	87	82	86	72	76	72	76	78	81	83	75	80	83	84	84	83	84
	Minimum	60	62	54	53	52	56	65	64	60	69	68	68	71	68	69	67	68	63	65	58	56	58	63	65	68	65	68	74	73	68	68
Lexington	Maximum	81	74	78	72	80	82	83	74	82	90	91	83	87	91	89	83	90	85	80	77	81	82	83	84	76	85	90	90	86	90	87
	Minimum	59	61	53	57	50	59	66	66	60	70	71	67	70	69	70	70	68	73	66	61	58	55	60	65	67	67	67	70	72	71	73
Maryville §§	Maximum	83	75	80	70	83	85	79	79	76	86	86	85	85	79	92	93	89	79	75	78	79	85	87	85	80	74	84	86	[illegible]	84	88
	Minimum	57	58	51	51	49	51	59	61	59	61	62	63	64	65	65	65	65	68	64	55	51	51	60	61	64	60	62	68	67	63	66
Oregon	Maximum	79	72	75	67	77	81	77	72	77	84	84	80	77	62	88	81	87	85	76	73	75	79	81	82	78	74	81	82	84	82	84
	Minimum	56	58	52	52	49	59	61	62	61	61	61	63	67	65	65	65	67	64	64	55	54	56	61	65	66	62	67	69	68	68	68
St. Joseph	Maximum	81	71	78	69	81	81	79	71	82	88	87	83	81	85	91	83	90	81	78	76	78	82	85	86	82	83	86	85	86	85	86
	Minimum	59	59	57	54	55	62	66	64	62	69	67	65	66	69	69	68	69	65	65	59	59	58	62	65	67	65	68	70	69	71	70
Trenton	Maximum	79	78	77	71	77	82	83	77	77	87	86	84	81	86	86	85	86	85	79	75	76	78	81	87	84	82	86	84	84	85	86
	Minimum	60	61	67	54	54	60	65	66	61	69	68	65	68	68	69	68	68	67	66	59	58	57	63	64	65	63	77	72	70	71	68

*, †, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charg
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
15
0
0.5
1
2
4
6
8
10
Winnipeg
Denver
Salt Lake City
Grand Junction
Cheyenne
Lander
Roswell
Dallas
Fort Worth
Abilene
Shreveport
Swift Current
Medicine Hat
Qu'Appelle
Minnedosa
White River
Port Arthur
Sault Ste Marie
Tonopah
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WEATHER BUREAU
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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

AUGUST, 1915

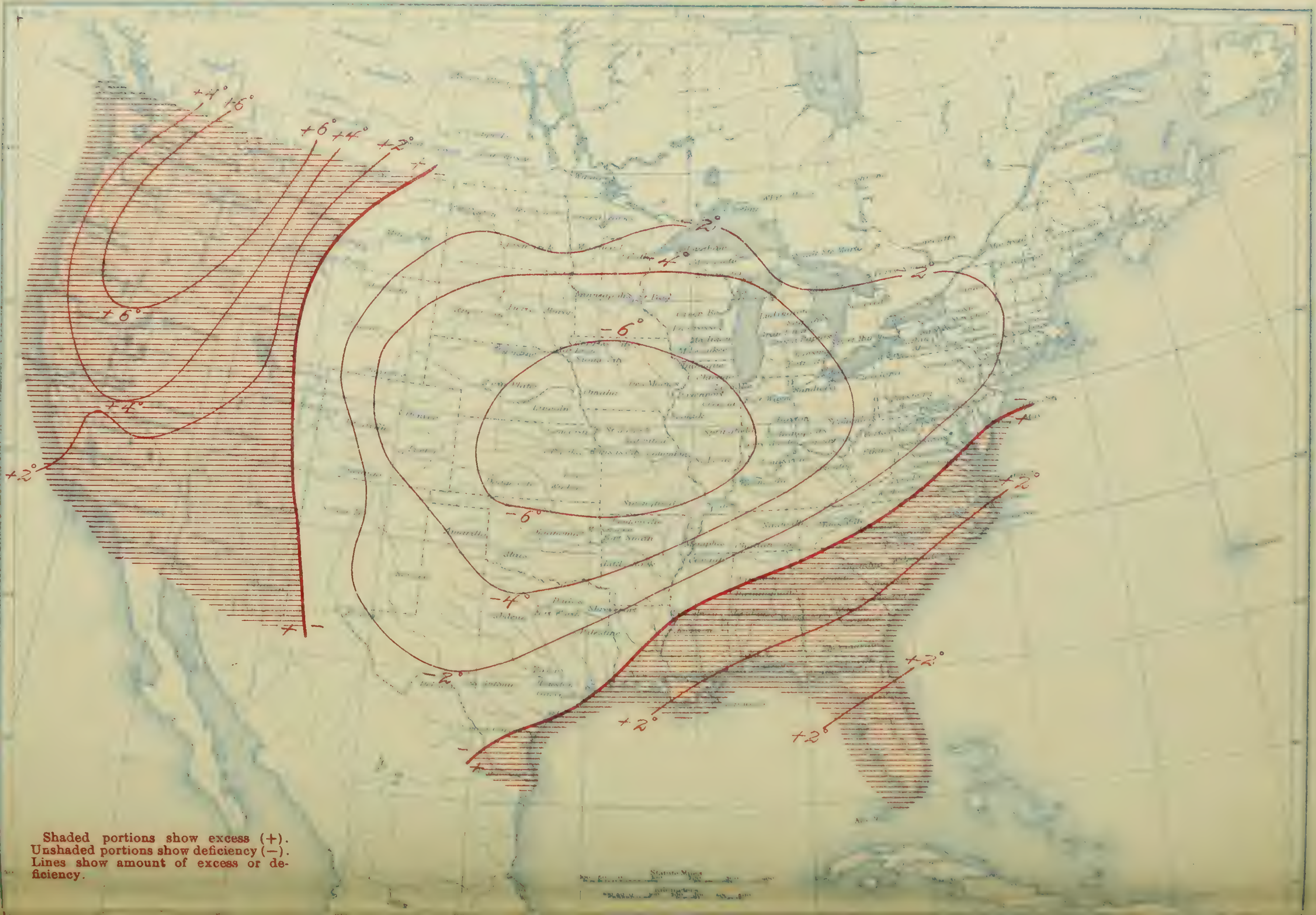
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
SEPTEMBER 24, 1915

Departure of the Mean Temperature from the Normal, August, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

L. XIX. Columbia, Mo., August, 1915. No. 8

GENERAL SUMMARY.

August, 1915, in Missouri was markedly abnormal. It was cessively cloudy, unusually cool, and excessively wet in all visions, save the northwest plateau. Taking the State as a ole the month was the coolest of its name since official records began in 1888, and the wettest in the past 48 years.

Except the 1st, 2d, and 15th, 16th and 17th, mean temperares were noticeably and continuously below normal; and th the maximum and minimum, 98 and 37 respectively, are lowest for August in 27 years. Light frost occurred at a stations on the 30th, and at 11 stations on the 31st.

Rains occurred almost daily, being excessive on several days, ecially from about the 7th to the 10th, and 18th to 21st. ring the latter period they were torrential in the eastern rt of the Ozark plateau and the southeast lowlands, and sed much damage to crops and other property—an afterth of the great tropical storm that entered the interior near lveston on the 16th-17th, and which moved northward in a dified form, crossing Southeast Missouri on the 20th. The lowing excessive rainfall occurred on the 20th: Poplar Bluff, 0 inches; Ironton, 6.70 inches; Oakfield, 8.18 inches, and Louis, 8.20 inches.

Thunderstorms were frequent, and quite severe on several s; hail, however, occurred on one day only, the 22d.

PRESSURE.

Vell marked high and low pressure waves passed near or over State at quite regular intervals of about every 4 or 5 days, as a result the weather of the month was changeable, and ered widely from the accepted August type. The most rked low, which was accompanied by torrential rains, sed the southeast part of the State on the 19th-20th. The t pronounced high pressure of the month passed on the -31st, attended by clear skies, unusually low temperatures, light frosts.

TEMPERATURE.

he monthly mean for the State, 65 stations reporting, was °. The mean departure from the normal for 51 stations ing 10 or more year's record was minus 6.5°, which is the test deficiency for any August since the beginning of ofl records in 1888. The mean temperatures and departures n normal by divisions were as follows: northeast plain, °, deficiency 7.4°; southeast lowlands, 72.9°, deficiency ; Ozark plateau, 69.8°, deficiency 6.5°; southwest plain, °, deficiency 6.8°, and northwest plateau, 69.0°, deficiency . Day temperatures did not reach 100° at any station, they were 90° or higher in the southeast lowlands on 8 or lays, and in other divisions on 1 to 3 days. On the morn- of the 30th and 31st minimum temperatures were 40° or r quite generally, the lowest being 37° at two stations, ch is the lowest since 1888.

HUMIDITY.

a rule the month was an unusually humid one. For the as a whole the relative humidity averaged from 10 to 14 cent above normal. The hygrograph record at Columbia s only seven days with the afternoon minimum below 50 cent, and only two days below 40 per cent.

PRECIPITATION.

he average precipitaton, 78 stations reporting, was 7.86 es. The departure from the normal for 67 stations having r more years' record was plus 4.15 inches, which is the largest excess for this month in 48 years. The average precipitation and departure from normal for each division were as follows: northeast plain, 6.72 inches, excess, 3.59 inches; southeast lowlands, 11.20 inches, excess 8.58 inches; Ozark plateau, 10.86 inches, excess 6.80 inches; southwest plain, 5.78 inches, excess 1.83 inches, and northwest plateau, 4.01 inches, deficiency 0.04 inch. The greatest local monthly fall was 15.14 inches at Koshkonong, and the least, 1.78 inches, at Macon. The greatest amount in any 24 consecutive hours was 8.20 inches, at the University of St. Louis, St. Louis, Mo. Excessive amounts of from 3 to over 8 inches occurred in 24 hours or less at 6 or more stations.

The average number of days with 0.01 inch or more precipitation was 12.

WIND.

The prevailing winds were from the northeast. Fresh to strong winds occurred on seven or eight days.

SUNSHINE AND CLOUDINESS.

The month was unusually cloudy. The average number of hours of sunshine for the State was 233, which is about 20 per cent below normal. At Columbia the percentage of possible sunshine was 47 per cent, while the normal is 75 per cent.

MISCELLANEOUS PHENOMENA.

Fogs, Dense 2d, 12th, 13th, 14th, 15th, 24th, 25th and 31st. Frost, Light—30th and 31st. Hail—22d. Halos, lunar 23rd. Halos, solar—9th, 12th and 23rd.

Thunderstorms occurred on 17 days; they were more or less general only on the 1st, 2d, 7th, 16th and 17th.

ERRATA FOR JULY, 1915.

Avalon—Monthly mean temperature should be 74.0. At Kidder the monthly mean should be 71.6.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity. 7 a. m.	7 p. m.	SUNSHINE Total hours.	Percentage of possible.	WIND. Total movement, miles.	Average hourly velocity.	Max. Velocity. Miles per hour.	Direction.	Date.
Columbia	30.04	92	......	199	47	4,349	5.8	26	n	21
Hannibal	29.98	88	......	......	......	4,835	6.5	27	n	20
Kansas City	29.99	84	63	258	61	6,704	9.1	33	n	29
St. Joseph	30.00	89	67	240	56	4,133	5.6	38	nw	22
St. Louis	29.80	88	74	233	55	7,525	10.1	54	ne	21
Springfield	29.99	90	74	214	51	5,527	7.4	32	nw	22
Cairo, Ill	29.94	90	77	......	......	5,237	7.0	44	se	1
Keokuk, Iowa	30.0	83	68	254	76	4,063	5.5	24	w	5

COMPARATIVE DATA FOR AUGUST.

YEAR	Temperature Mean	Departure	Highest	Lowest	Precipitation Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	Number of Days With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	74.0	−1.6	110	48	7.25	+3.80	......	0	11	......	......	......
1889	73.5	−2.1	101	52	1.96	−1.49	......	0	14	......	......	......
1890	73.3	−2.3	104	49	4.84	+1.39	......	0	9	......	......	......
1891	73.2	−2.4	108	38	5.34	+1.89	......	0	8	......	......	......
1892	74.3	1.3	100	40	2.42	−1.03	4.50	0	6	17	8	6
1893	72.8	2.8	100	40	2.20	1.25	5.60	0	4	18	10	3
1894	77.0	+1.4	111	39	1.58	−1.87	3.07	0	5	14	16	1
1895	75.3	−0.3	104	48	4.23	+0.78	3.50	0	8	15	11	5
1896	76.6	+1.0	108	41	3.25	−0.20	4.80	0	6	17	10	4
1897	74.1	−1.5	108	41	2.39	−1.06	6.88	0	6	19	9	3
1898	75.8	0.2	103	44	3.03	−0.42	5.00	0	5	17	10	4
1899	78.8	+3.2	107	49	3.35	−0.10	4.75	0	7	18	10	3
1900	80.3	+4.7	105	52	3.51	+0.06	4.28	0	6	19	9	3
1901	78.4	+2.8	109	47	1.88	−1.57	2.77	0	5	19	9	3
1902	75.0	−0.6	103	47	6.16	+2.71	4.33	0	10	14	11	6
1903	74.4	−1.2	102	43	5.40	+1.95	7.84	0	10	16	11	4
1904	73.7	1.9	100	43	5.46	+2.01	6.40	0	8	16	10	5
1905	76.4	+0.8	102	48	4.69	+1.24	4.43	0	8	19	7	5
1906	76.6	+1.0	101	40	4.72	+1.27	3.94	0	11	14	10	7
1907	77.3	+1.7	109	47	3.71	+0.26	3.55	0	9	17	8	6
1908	76.4	+0.8	102	46	3.87	+0.42	6.30	0	8	17	9	5
1909	79.5	+3.9	110	40	0.55	−2.90	4.00	0	2	24	6	1
1910	74.7	−0.9	103	40	2.77	−0.68	4.21	0	6	15	9	7
1911	75.4	−0.2	109	41	4.20	+0.55	5.17	0	7	15	8	8
1912	76.2	+0.6	104	41	4.19	+0.74	2.62	0	9	17	8	6
1913	82.8	+6.9	110	41	1.06	−2.51	3.51	0	3	22	7	2
1914	78.0	+1.8	106	49	4.25	+0.60	3.50	0	9	15	9	7
1915	69.8	−6.5	98	37	7.86	+4.15	8.20	0	12	12	9	10

Climatological data for August, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	....	....	....	....	....	..	8.68	+5.28	3.25	0	14	15	0	16	ne	C. Randecker.
Brunswick	Chariton	652	36	68.5	-6.8	89	16	44	31	29	5.35	+1.33	2.34	0	10	10	8	13	e	Louis Benecke.
Columbia	Boone	784	26	68.2	-6.5	88	16	40	31	32	4.29	+1.25	1.45	0	14	6	11	14	ne	U. S. Weather Bureau
Fayette	Howard	725	31	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	68.3	-8.7	91	16	39	31	38	5.92	+2.62	1.60	0	15	15^{a}	1^{a}	14	n	L. A. Hagey.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	6.80	+3.99	2.10	0	9	8	16	13	se	J. W. Pulliam.
Hannibal	Marion	534	23	68.1	-6.9	89	16	41	31	30	4.49	+1.11	1.13	0	12	7	9	15	n	U. S. Weather Bureau
Hermann	Gasconade	482	42	....	....	....	....	....	....	....	8.44	+5.45	2.51	0	15	9	7	15	w	C. T. Maisenand
Jefferson City	Cole	628	30	69.3	-7.4	92	16	44	31	29	5.61	+2.94	1.45	0	14	21	0	10	n	Miss Emma Swift.
Keytesville	Chariton	660	3		....	....	....	....	....	....	8.06	....	4.16	0	11	....	..	.	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	68.2	-6.7	86	15	38	31	36	6.71	+3.80	3.10	0	10	15	8	8	e	C. T. Farrell.
Macon	Macon	881	18	68.0	-9.4	90	16	41	31	32	1.78	-1.12	0.59	0	8	12	8	11	ne	John A. Cook.
Mexico	Audrain	797	38	69.2	-6.9	93	16	39	31	35	6.09	+3.36	2.80	0	12	12	3	16	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	69.1	-7.5	90	1+	47	31	27	13.21	+9.97	8.18	0	14	6	14	11	n	E. L. Stevens
Palmyra	Marion	652	4	68.0	.....	91	16	39	31	33	5.47	+2.27	2.06	0	12	6	14	11	nw	W. B. Markell.
St. Catherine	Linn	914	3	67.7	.....	86	7+	42	31	27	3.57	....	1.17	0	10	8	19	4	ne	L. D. Baker.
St. Charles	St. Charles	614	38	69.8	-6.6	91	1	45	31	30	10.93	+7.98	5.90	0	12	8	10	13	s	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	70.4	-6.8	92	16	52	31	21	11.43	+8.77	7.02	0	13	5	16	10	ne	U. S. Weather Bureau
St. Louis (2)	do.	578	1	70.0	.....	91	16	50	31	24	13.01	......	8.20	0	15	7	13	11	n	St. Louis University
Steffenville	Lewis	576	23	69.8	-7.0	93	15	41	31	39	6.26	+2.79	1.48	0	10	9	16	6	w	Frank Hall
Unionville	Putnam	1,072	23	67.0	-8.7	88	1+	37	30	34	2.30	-1.72	0.97	0	5	12	10	9	nw	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	...	2.25	..	1.60	0	3	.	....	....	...	C. B. Ellis.
Warrenton	Warren	865	25	68.8	-8.4	91	2	45	31	30	7.26	+4.52	3.00	0	13	11	9	11	nw	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	7.40	. . .	3.35	0	10	8^{z}	2^{z}	13^{z}	w	D. L. Albert
Cardwell	Dunklin	225	5	73.6	....	94	1+	48	31	37	10.28		2.82	0	11	19	7	5	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	75.1	-3.7	92	1+	51	31	33	10.79	+7.79	3.70	0	11	16	8	7	e	H. L. Averill.
Doniphan	Ripley	140	11	72.2	-5.1	91	1+	44	31	37	13.98	+10.23	4.00	0	11	12	7	12	sw	W. W. Martin.
Jackson	Cape Girardeau	458	25	73.0	-2.8	95	6	43	31	40	9.15	+6.09	4.10	0	12	9	5	17	n	L. M. Bean
Marble Hill	Bollinger	420	24	69.8^{d}	-7.1	93	16	44	31	36	10.33	+7.38	4.61	0	7	8	9	1		Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	12.18	+9.01	4.10	0	17	14	1	16	se	Miss Josie Smith.
Patton (near)††	Bollinger	430	1	....	....	....	....	....	....	....	12.05		4.50	0	13	7	0	24	s	George F. Ellis.
Poplar Bluff	Butler	333	12	72.7	-5.9	98	1	45	31	35	14.55	+11.41	5.30	0	14	13	4	14		Albert E. Cox
Sikeston	Scott	328	15	73.6	-4.1	94	2+	41	31	32	12.71	+9.34	3.15	0	17	12	15	4	nw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	72.6	-4.4	91	16	50	31	23	10.28	+7.35	2.62	0	13	8	10	13	n	U. S. Weather Bureau
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	. .	....	9.94	+6.13	3.04	0	15	13	5	13	e	G. V. Randolph.
Bagnell	Miller	504	..	....	.....	....	....	....	....	....	7.33	......	1.75	0	15	15	5	11	w	Mrs. Nellie A. Houser
Belle	Maries	1,000	24	....	.....	..	....	....	....	....	.....	....	....	....	....	....	....	....	..	A. J. Wofford
Birchtree	Shannon	1,200	22	70.2	-5.9	90	6	42	31	34	14.92	+10.95	3.08	0	13	13	7	11	ne	A. H. Kirkendall.
Bolivar	Polk	1,020	28	70.4	-6.8	92	16	41	31	34	9.50	+5.84	2.56	0	12	13	15	3	ne	A. C. Fink
Cassville	Barry	1,500	5	69.6	....	91	5	39	31	44	11.23	.....	3.82	0	8	19	4	8	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	69.7	..	95	1	39	31	42	9.84	......	2.17	0	14	17	2	12	s	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	70.1	-7.9	91	16	42	31	38	7.47	+3.64	2.92	0	13	14^{a}	4^{a}	12^{a}	sw	H. E. Dean.
Duncan	Webster	1,400	3	.	..	....	....	....	....	....	.....	....	....	....	....	....	....	....	....	C. A. Mingus.
Eldon	Miller	934	15	70.0	.....	92	16	38	31	32	5.81	+1.86	1.77	0	14	9^{a}	17^{a}	4^{a}	w	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	68.6	....	91	16	48	18+	27	14.10	.....	3.05	0	15	13	3	15	ne	R. C. Walton
Gano ‡‡	Dent	1,250	12	69.6	-7.1	93	16	39	31	34	13.67	+10.04	5.37	0	12	12	9	10	ne	A. C. Leach.
Goodland	Iron	1,000	11	70.0	-4.6	90	17	38	31	29	12.15	+9.17	5.60	0	10	14	8	9	w	F. M. Adams.
Hollister	Taney	1,000	7	73.0	.....	94	15+	42	31	34	9.54	+5.29	2.30	0	11	21	0	10	sw	W. P. Chapmann
Houston	Texas	1,280	23	69.0	-6.2	89	1	40	31	31	10.61	+7.07	2.36	0	10	12	8	11	nw	R. F. Harmon.
Ironton	Iron	925	38	69.8	-4.5	92	16	37	31	36	14.69	+11.26	6.70	0	14	5	12	14	ne	W. H. Delano.
Koshkonong	Oregon	911	15	..	....	90	1+	46	31	24	15.14	+11.41	2.87	0	14	9^{b}	6^{f}	9^{b}	ne	R. M. Hitt
Lebanon	Laclede	1,265	27	70.2	-6.2	92	15	38	31	37	9.40	+6.20	2.93	0	19	11	6	14	sw	O. L. Weissgerber.
Lockwood	Dade	1,088	21	70.4	-6.5	90	16	45	31	30	8.56	+4.49	1.87	0	13	10	10	11	ne	C. S. Crow.
Mountain Grove	Wright	1,490	17	68.6	-6.9	89	1	59	31	34	14.89	+11.03	4.70	0	17	8	9	14	sw	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	68.4	-9.5	91	16	42	31	34	7.96	+3.86	2.65	0	6	9^{b}	6^{b}	7^{b}	nw	J. R. White & Son
Neosho	Newton	1,083	33	70.7	-6.2	93	16	40	31	35	9.06	+4.98	1.86	0	12	13	10	8	sw	W. O. Buck.
Rolla	Phelps	1,139	34	69.4	-6.4	90	1+	42	31	32	12.29	+8.57	4.35	0	15	10	12	9	nw	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	68.8	-6.0	88	16	48	31	24	10.81	+6.50	3.06	0	14	11	10	10	nw	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	..	......	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	70.8	.....	92	6	44	30^{d}	33	8.59	......	3.75	0	16	8	8	15	sw	Darby Fruit Farm.
Clinton	Henry	800	29	70.0	.....	92	16	42	31	34	5.19	+1.84	2.00	0	8	9	17	5	nw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	69.1	-6.2	90	16	44	31	33	6.69	+2.66	2.20	0	12	9	6	16	ne	A. J. Sharp.
Lamar	Barton	964	35	71.1	-6.1	93	16	44	31	33	7.79	+3.66	1.88	0	15	12	5	14	ne	E. H. Adams.
Lamonte	Pettis	863	27	70.6	.....	92	16	38	31	38	3.28	-0.20	1.60	0	8	11	11	9	sw	J. Ed. Hall.
Marshall	Saline	779	25	68.9	-7.1	91	16	41	31	35	5.38	+1.74	1.36	0	13	13^{a}	8^{a}	9^{a}	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	....	.....	....	....	....	....	....	3.90	+0.31	0.90	0	11	17	10	4	nw	C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	5.13	+2.32	1.56	0	10	13	2	16	nw	W. E. Mathews
Warrensburg	Johnson	883	37	70.4	-6.7	95	16	43	31	34	3.35	-0.17	1.34	0	13	10	9	12	ne	Geo. H. Collins.
Warsaw	Benton	883	11	70.3	-7.9	93	16	40	31	36	8.54	+4.29	2.25	0	13	4	22	5	w	J. R. Smith, M. D.
Waverly††	Lafayette	642	1	....	.....	....	....	....	....	....	3.29	......	1.68	0	8	13	4	14	ne	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	71.5	-5.7	92	16	44	30	29	7.30	+3.33	4.65	0	6	20	5	6	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	68.4	-5.9	89	7+	39	30+	35	4.09	-0.08	1.40	0	11	9	14	8	nw	M. H. Moulton.
Chillicothe	Livingston	......	1	....	.....	....	..	....	....	....	3.38	-1.47	0.94	0	5	13	2	16	.....	Hocey O. Dupy
Conception	Nodaway	982	31	67.4	-6.5	87	16	41	30	26	3.04	-0.67	0.66	0	8	10	14	7	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	68.8	-6.7	94	16	42	30	33	3.79	-0.07	1.26	0	10	19	7	5	nw	W. H. Campbell.
Kansas City	Jackson	963	27	70.1	-5.7	88	16	47	30	26	4.46	-0.29	1.61	0	12	7	15	9	n	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	69.1	-6.0	87	16	42	30	26	5.49	+1.45	2.25	0	10	14	6	11	ne	J. F. Sharp.
Lexington	Lafayette	813	34	69.7	-5.9	90	16	43	31	30	2.97	-0.27	1.06	0	12	12	1	18	w	J. W. Keithley.
Liberty	Clay	864	27	69.0	-7.3	92	16	43	30	30	2.20	-2.06	0.90	0	7	15	14	2	sw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	68.4	-6.6	91	16	39	30	37	4.78	+0.32	1.58	0	9	21	1	9	s	J. R. Brink.
Oregon	Holt	1,113	60	67.1	-8.0	85	1+	41	30	24	2.73	-1.57	0.54	0	12	12	17	2	ne	Tom Curry.
St. Joseph	Buchanan	967	44	69.8	.....	88	16	46	30	29	3.12	-0.73	1.15	0	10	7	16	8	ne	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	68.4	.....	87	7+	40	30	29	4.66	..	1.33	0	14	17	8	6	ne	John F. Frazier.
Trenton	Grundy	812	21	69.2	-6.2	88	1+	42	30	24	4.10	+0.60	1.46	0	9	12	9	10	ne	W. H. Estes.
State means and extremes				69.8	-6.5	98	1	37	30+	44	7.86	+4.15	8.20	0	12	12	9	10	ne	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ^{a}, ^{b}, . . . appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

+ Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1 of Dean, Anderson, of Gano, Salem R. F. D. No. [illegible] of Mt. Vernon, Aurora, R. F. D. No. 1

Daily precipitation for August, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
vile	Missouri	.42	3.25	.06				.09	.06		.05			T.	.65				1.34	.20	.72	.30		.15				.40		.99			8.68
swick	Grand	T.	.28	.94											.15			.37	2.34	.10	.05	.05			.20					.87	T.		5.35
bia***	Missouri	T.	.03	.01				.61		T.	.33		T.	.59		.01	.23	.24	.07	.09	1.36			.22			.19	T.	.31	T.			4.29
te	do																																
n	do	.07	.84	.01				.05			.11	.03	.01	.87		.01		1.60	.30	.02	1.51						.10			.39			5.92
	Mississippi	.23		2.08				.37				.20	.47				2.10	1.26									.05		.04				6.80
abal***	do	.68	.38	.07	T.			.90			.02	.86				.24	.02	.10	.06		1.13						T.		.03	T.			4.49
am	Missouri	.90	1.06	.06					T.		.05	.14		.12	.98			.13	1.09	.25	2.51	.82			T.			.04		.28	.01		8.44
son City	do	.10	.05	.85					.11		.15	.05		.12	.05			.05	1.45		1.35	.15						.23		.90			5.61
sville	Chariton	.35	.92					.06						.02			1.40	4.16		.15	.23			.27			.02		.48				8.06
ana	Mississippi	.06	.74	.16				.25			.01			T.			.86	3.10	.11		1.31	.11					T.		T.	T.			6.71
n	Chariton	T.	.10	.34	T.				T.					T.	.10			.13	.59		T.	.13			.10			T.		.29			1.78
o	Mississippi	.03	.11	.65	.01						T.	.13			.18				2.80	.02	.91	.78						.05		.42			6.09
ld	Meramec	.50	.72	T.					.22	T.	.51	.16	.02	.73		.43	.04	.70	.09	.14	8.18						T.			.77			13.21
ra	Mississippi		2.06	.47	.01									.09	.08	.19	.24		.16	.99	.27	.86								.05			5.47
terine	Grand	.48	.39	.01									.03	.05	T.		.80	1.17	T.					.32			T.		.28	.04			3.57
arles	Missouri	1.74	.04	.18				.33			.34	T.	T.	.40	.19			.02		1.30	5.90	.26								.23			10.93
uis (1)***	Mississippi	.10	.94	.02				.14		T.	.56	T.	T.	.13	.15	T.		1.49	.14	.44	6.85	.11					T.	T.		.36			11.43
uis (2)	do	.19	1.06	.04				.15		T.	.69	T.		.18	.21	.01		1.06	.14	.56	8.20	.10					T.	.01		.43			13.01
ville	do	1.48	.65	.45				1.30				T.	.26		T.		1.17	.28	.33		.27						T.		T	.07			6.26
ville	Grand			.69	T.				T.		.10			T.				.97						T.			.12			.42			2.30
na	Mississippi	.50		1.60														.15											T.	T.			2.25
ton	do		.01	.25	.03						.04	.19		.08	.50			.06	1.55	.01	3.00	1.34						T.		.20			7.26
heast Lowlands.																																	
rardeau	Mississippi	.50	.05						.35		.15	1.70	.10								3.35	35						.80		.05			7.40
ell	do	.60	.18							.70	.45			T.				T.	.96	2.82	2.32			.15			1.40	.10		.60			10.28
rsville	do	.13							T.	.39	.43	.65			T.			T.	1.65	3.70	1.74			.04			1.30	.06		.70	T.		10.79
au	Black	.13						.39			.68	.87	.06					T.	4.00	2.40	3.60			.42			1.23	.20					13.98
a	Mississippi		.29						.30		.90	.20			1.65			.02	.85	4.10	.35						.34	.02		.13			9.15
Hill	do	.20	.25	**	**	**	**	**	**	**	**	**	**	**	2.60				1.25	1.02	4.61								.40				10.33
adrid	do	.05	.10						.02	.06	.54	.35	.36	.09	T.				2.60	2.40	4.10	.20			.06		.01	1.30		.20	.04		12.48
(near	do	.60	.40				.60			.40	.70	.10	.10					1.45	1.45	.95	4.50			.60	.20								12.05
Bluff	Black	.63		.03					.26		.98	.65						T.	3.00	.86	5.30	.13			.11		.48	2.15		.15	.12		14.85
n	Mississippi	1.05	.02	.15					.19	1.08	.88	.99	.01	.07			.08	.22	1.26	1.08	3.15						1.77	.10		.61			12.71
ll***	do	2.60	.61						.20	1.40	.39	.62	T.	T.	T.			.13	.66	1.34	1.24						.65	.19		.25	T.		10.28
Plateau.																																	
ton	Gasconade	.12	.14	.08				.65	.35	.45	.94	.60							.91	1.05	3.04	.86		.05				.55		.15	T.		9.94
	Osage				1.15			.50	.15	.10	1.23	.08		.10	.11				1.10	.15	1.75	.15		.12				.50		.14	T.		7.33
	Meramec																																
ee	Black	.22						.65	.28	.06	1.90				.45			.05	2.93	3.08	2.28			.47			2.20			.35			14.92
	Osage		.46					.06	.80	1.25	2.56		.37	.05				1.45	.32	1.25				.76			.17						9.50
	White	T.	.84							1.39				.08				T.	1.06	3.82	1.74			2.03			.27						11.23
r	Gasconade	T.	.13	T.			1.37			1.50	2.00	.40		.09				.04	.37	.56	2.17			.23			.36		.33	.29			9.81
	Neosho	.02	.07						1.42	.19	1.10			.25			.28	.10	.17	2.92	.10			.72			.13						7.47
h	Osage																																
	do		.10	.02				1.33		.40	.42	.11					.30	.30		.40	1.77				.13		.46		.04	.03			5.81
ty	Black	2.00							.80	.50	1.20		.30	.50	.50	.30	.10	2.00	1.70	.10	3.05						.60			.45			14.10
	Meramec	.44						.37	.25	.61	1.59		.38	.79					2.16	1.14	5.17						.43			.34			13.67
nd	Black		.58					.17		.80	1.15		.25	.50						2.85	5.00						.40			.45			12.15
l	White		.30						.40	.10	2.30	.20							1.55	2.00	1.40			.84			.35			.10			9.54
	Gasconade	T.	.28	T.				.90	.43	T.	2.36							T.	1.10	1.71	2.30			.39			.89		.25	T.			10.61
	Mississippi	.45	.35	.17	T.				.35	T.	.85	.30	T.	.70	1.50				.52	.65	6.70	1.40		T.	T.			.50		.25	T	T.	14.69
ong	Black	.04	.17					.23	T.		1.28	.11		.05	.80				2.87	‡	‡	7.34		1.43			.75			.07			15.14
	Osage	.90		.15				.15	.13	.37	1.62	.15		.30	.30				.03	.31	2.93	.34		.20	.06		.20	1.11		.13	.02		9.40
od	do		.25					.26	.37	.61	1.87		.12	.15		T.		T.	.35	1.07	.59			1.70			1.10			.12			8.56
an Grove	White	T.	.48	.28				.55	.47	T.	1.54	.14			T.	.07			2.04	.68	4.70	.26		.37	.43		1.40	1.26		.18	.04		14.89
Vernon	Neosho																		1.38	2.65	.66			2.21			1.06			T			7.96
	do	.13	.15					T.	1.40	.09	1.24			.51		1.38			.44	1.86	.58			1.35			.13	T.	T.	T.			9.06
	Meramec	.39		.13	T.			.34	1.03	.13	1.90	.23		.42	.28				1.48	.30	4.35	.70						.49		.12			12.29
eld***	White	T	.67	T.				T.	.10	.22	.99	T.		.02		T.		1.97	.17	3.04	.38		.53	1.81			.80		.07	.04			10.81
land	Osage																																
west Plain.																																	
t	Osage		.08					.06	.06	3.75	.17	.02		.28	.09		T.	.01	1.02	.15	.08			1.10			1.40		.02	.30			8.59
	do									.58				.55			.13	.13		.50	.25			1.05			2.00						5.19
nville	do			.21						.15	.15			.85	.04				1.04	.10	.34			1.39			2.20	.14		.08			6.69
	Neosho	.70	T.	.02	T.				.77	T.	1.69	.16		.36	.12		1.88		.04	.03	1.10			.46	.36		.08	T.		.02			7.79
te	Missouri	T.	.15	T.				T.		.12	.06		T.	.08				1.60	T.	T.	.25			.60			.42		T.				3.28
ll	do		.40	T.				1.36		.03			T.	.26			.20	1.02	.03	.03	.20			.10			.40		.70	.65			5.38
t	Osage		.52					.10	.15	.90	.87							.13		.04	.07			.84			.11			.17			3.90
a	do								.03	.48	1.56	.06							.10	.16	1.04	.20		.64				.86					5.13
sburg	Missouri		.06	T.			.07		.15	.12		.08	.11	.02				1.34	.08	.02	.17			.60			.53		T.	T.			3.35
s	Osage		.12					.37		2.25	.38		.05	T.	T.	.18	T.	.05	.18	.39	1.52			.97			2.03		.05				8.54
y	Missouri		T.	.04		T.		.08							.20				1.68	T.	.08			.38			T.	.15		.68			3.29
west Plateau.																																	
	Grand		1.85														2.50	2.15						.37				.28		.15			7.30
y	do	T.	1.40	T.				.54		T.		.10	.05		T.		.53	.47	.08				.05	.15			.05		.67				4.09
the	do			.66														.94	.85					.60						.33			3.38
tion	Missouri	.30	.65	T.				.65				.03			T.		.09	.20	.66				.46						T.				3.04
ity	Grand	.10	1.26	T.				.18				.08		T.	.08		.54	.12	T.				.35	.08					1.00				3.79
City***	Missouri		1.61					.08					.27	.01	.35		.01	67	.01	.05			1.10				.05		.25				4.46
	Grand	.02	2.25	.45				.05	.15									.24	1.85					.30			.05			.13			5.49
ton	Missouri	.02		.64					.04					.05	.03				1.06	.08	.03			.70	.16			.06		.10			2.97
	do		.77	.08				.11					.17		.05		T.	.90					.12						T.				2.20
lle	do		1.58	.47					.25			.03			.01			.75	1.13					.55			.01		T.				4.78
	do	.28	.37	T.			T.	.07			.03		.41				.04	.54	.05				.32	.38			.06		.18				2.73
ph***	Missouri	.03	.43	T.			T.	T.	T.		.24		.34				T.	1.15	.06				.73			.02	.06		.06				3.12
	do	.01	.47	.01				.01		.01			.02		.01		1.11	1.38	.08				.37	.78			.02		.38				4.66
	Grand	.08	1.46	T.			.02	.44					T.	.06			T.	.42					.09				.08		1.45				4.10

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xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

Trace, or less than 0.01 inch.

Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

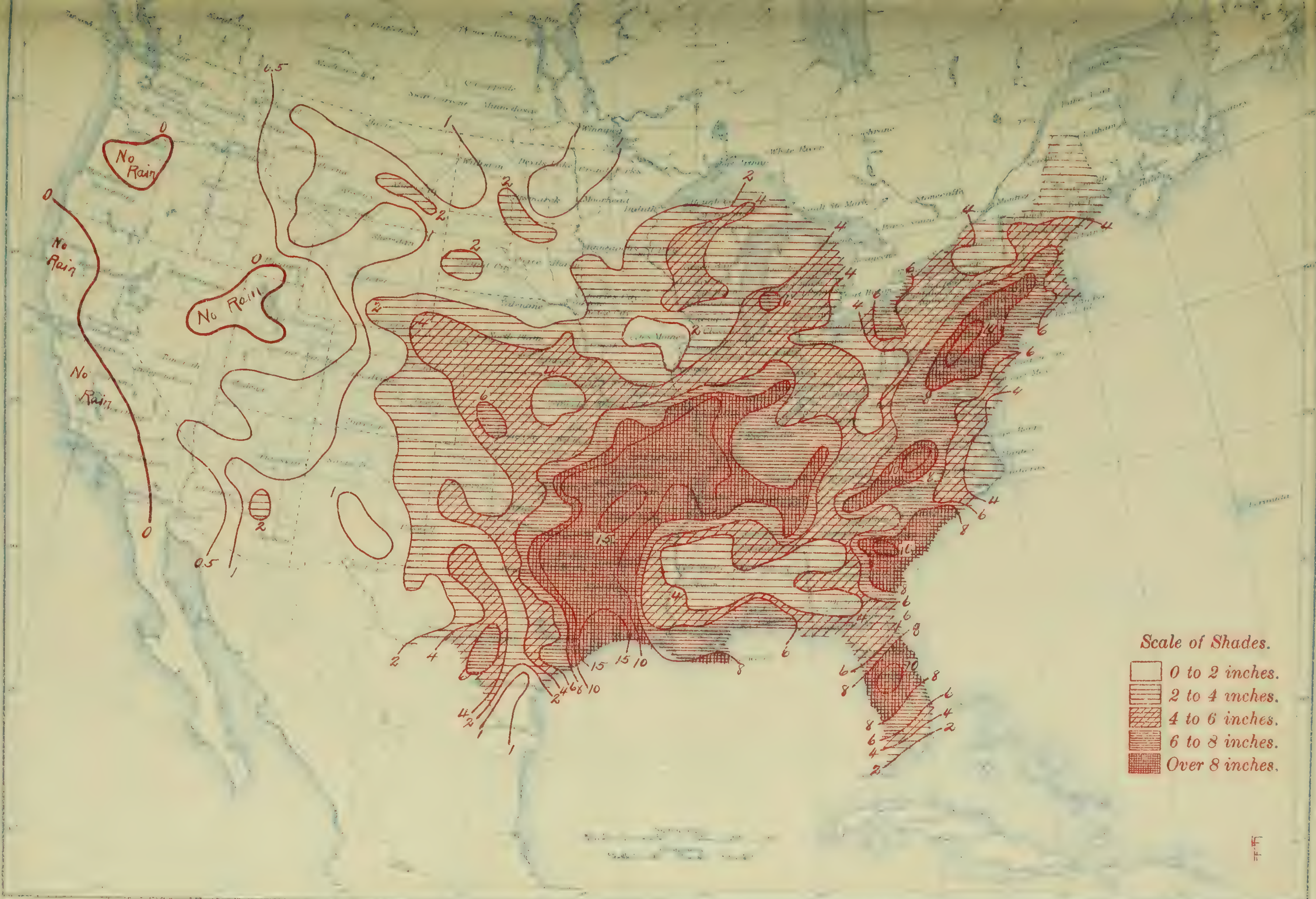
Precipitation in the next following measurement.

eparate dates of fall not recorded.

Daily temperatures for August, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	87	84	64	71	81	81	82	85	77	81	82	71	75	83	87	89	85	70	72	70	80	82	79	74	76	76	75	75	69	66
	Minimum	72	69	50	54	56	59	63	64	64	65	63	63	63	64	64	68	69	66	62	60	54	57	62	60	52	53	56	54	53	45
Columbia	Maximum	85	86	60	68	79	84	82	86	77	77	82	79	70	82	88	88	86	72	69	64	78	82	78	74	76	68	73	74	65	64
	Minimum	72	70	58	55	55	62	65	64	64	63	61	60	62	62	66	71	68	63	61	57	55	55	64	57	49	61	55	49	55	48
Fayette	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum	86	87	70	69	77	84	81	86	84	73	82	80	78	83	87	89	79	68	73	66	78	82	81	72	74	69	73	75	62	64
	Minimum	70	68	58	56	59	56	64	65	63	67	65	60	61	63	64	76	68	60	60	57	61	56	61	55	48	56	54	48	57	45
Jefferson City §§	Maximum	90	90	66	69	82	85	83	89	75	75	83	81	72	85	91	92	89	71	64	64	79	85	77	77	78	68	73	78	68	66
	Minimum	71	69	62	55	55	61	65	63	67	65	61	61	63	62	65	70	69	68	63	59	55	55	62	64	53	56	56	52	54	52
Macon §§	Maximum	85	88	64	70	78	84	85	86	83	81	83	82	76	84	89	90	81	66	75	66	73	83	80	74	76	71	75	74	62	65
	Minimum	71	67	61	55	55	56	58	65	63	65	61	60	60	60	62	65	65	62	61	59	55	56	56	58	49	55	54	49	53	44
Mexico §§	Maximum	87	90	70	70	81	86	85	87	81	77	84	81	74	85	89	93	89	70	70	63	81	85	82	82	79	68	74	77	68	65
	Minimum	71	68	63	55	55	56	72	63	62	63	59	61	60	62	63	70	69	65	62	61	55	55	58	61	47	57	55	48	58	47
Oakfield	Maximum	90	88	70	67	80	85	84	88	81	72	81	83	82	83	87	90	87	70	65	63	73	82	85	80	78	68	75	77	73	65
	Minimum	68	69	60	56	55	60	61	65	64	65	65	60	62	65	66	71	68	64	60	56	57	55	63	65	51	58	55	53	53	53
St. Catharine	Maximum	82	85	70	70	80	83	86	85	83	81	80	81	73	80	85	86	76	70	73	68	79	80	79	75	74	70	73	71	62	63
	Minimum	70	66	59	55	54	56	63	65	61	64	61	71	59	60	63	68	66	62	60	59	53	57	63	57	49	60	54	50	56	43
St. Louis (1)	Maximum	91	90	72	67	79	83	83	88	85	71	79	80	82	81	87	92	86	72	68	64	78	81	81	77	73	68	73	76	72	65
	Minimum	72	70	59	58	59	64	68	68	70	67	66	66	66	66	69	72	70	62	61	59	60	60	64	62	56	66	57	57	57	53
Unionville §§	Maximum	88	87	66	73	78	84	83	86	85	83	84	85	83	84	87	88	74	70	76	72	83	81	83	72	80	68	76	72	63	66
	Minimum	65	68	57	52	53	56	60	61	60	59	56	55	58	60	61	64	66	58	57	55	51	56	60	54	47	50	47	49	52	37
Warrenton §§	Maximum	90	91	68	61	81	86	83	87	82	73	80	82	80	83	80	83	89	66	68	65	80	85	81	67	78	69	74	75	72	65
	Minimum	69	69	63	56	55	60	61	65	65	66	64	60	62	62	65	69	67	60	61	59	56	58	61	63	50	58	54	50	58	52
Southeast Lowlands.																															
Cardwell	Maximum	94	90	85	82	86	90	90	88	93	85	80	88	90	90	90	94	93	86	82	71	82	84	88	87	85	78	78	81	80	76
	Minimum	71	70	68	57	53	53	60	70	65	65	70	60	63	62	62	66	74	70	58	66	52	54	56	67	64	62	60	60	60	52
Caruthersville	Maximum	92	91	85	81	86	91	90	85	88	85	82	86	90	90	92	89	92	82	74	72	81	82	86	85	84	80	78	82	78	72
	Minimum	....	74	70	61	56	58	65	70	68	70	72	76	67	72	72	74	76	70	69	64	64	58	64	66	65	65	64	62	66	61
Doniphan	Maximum	91	87	80	82	87	91	88	85	86	80	80	87	87	89	89	91	85	79	76	72	82	85	80	86	80	75	75	80	76	70
	Minimum	70	70	68	60	52	54	60	73	73	....	....	....	....	....	....	....	73	67	67	62	56	55	62	63	60	60	59	56	64	58
Jackson	Maximum	94	92	83	80	85	95	88	86	82	81	76	83	87	85	90	94	86	83	75	78	81	84	85	88	80	77	77	81	77	72
	Minimum	71	71	66	61	64	55	59	65	76	65	65	59	62	62	65	74	74	70	65	61	60	55	62	65	55	60	62	55	63	56
Marble Hill	Maximum	90	80	79	....	....	....	....	....	....	....	....	....	....	90	91	93	81	78	72	66	68	72	75	78	80	74	78	80	81	70
	Minimum	70	70	65	....	....	....	....	....	....	....	....	....	....	54	64	68	68	60	62	52	60	54	65	65	56	60	62	62	62	59
Poplar Bluff §§	Maximum	98	90	85	81	81	86	91	86	83	86	82	81	88	89	90	92	91	86	74	73	73	83	85	83	86	81	71	80	81	79
	Minimum	70	71	67	60	54	54	56	62	67	68	67	60	60	62	66	69	70	69	67	67	55	55	62	66	59	62	59	58	62	59
Ozark Plateau.																															
Birchtree	Maximum	88	84	79	77	84	90	83	86	82	71	82	85	85	85	87	88	82	78	70	65	79	82	75	84	78	74	75	78	72	67
	Minimum	69	69	63	53	57	56	60	66	69	62	63	61	60	64	66	67	67	68	65	59	53	57	55	64	59	61	58	54	62	56
Cassville	Maximum	88	88	78	80	91	84	85	84	85	80	82	83	82	79	84	89	84	72	70	73	79	85	85	84	83	84	74	68	78	67
	Minimum	64	63	58	44	47	57	65	63	64	61	59	60	59	63	61	66	64	67	65	60	45	60	60	61	54	66	59	54	54	51
Duncan	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	91	88	76	83	84	90	82	88	83	79	83	82	82	85	90	92	88	86	75	64	82	83	78	77	75	71	75	77	....	....
	Minimum	69	67	59	53	52	62	64	62	64	62	60	59	59	59	63	67	67	63	59	56	52	54	63	61	51	50	55	49	56	48
Fruit City	Maximum	90	87	67	77	81	88	81	83	76	70	79	81	85	69	86	91	80	70	82	76	79	82	82	85	79	73	72	77	67	50
	Minimum	63	60	55	50	60	64	63	60	61	58	62	57	54	55	65	71	62	48	65	60	52	58	65	64	65	64	55	60	59	52
Gano	Maximum	90	90	74	73	81	88	81	88	78	70	80	86	83	81	90	93	88	80	70	66	77	85	82	79	80	79	73	77	73	66
	Minimum	72	62	60	50	53	60	61	64	65	61	63	60	61	63	65	66	67	67	62	56	54	53	60	65	64	52	52	57	58	51
Hollister	Maximum	92	86	82	84	88	90	94	88	80	74	84	88	88	82	94	94	90	74	70	74	82	84	86	88	88	84	78	80	72	72
	Minimum	70	68	66	58	56	60	64	66	70	68	64	62	64	62	64	66	68	70	68	66	56	54	56	62	64	68	66	56	62	52
Ironton §§	Maximum	89	88	70	73	81	86	82	86	80	70	80	85	84	85	88	92	85	76	67	68	80	83	85	84	80	67	75	80	76	66
	Minimum	69	68	68	58	50	53	56	66	68	65	65	56	59	64	62	67	69	69	64	64	59	49	59	65	51	58	61	51	60	54
Lebanon §§	Maximum	91	90	71	80	87	91	88	90	73	72	83	86	83	83	92	91	89	78	67	63	85	82	77	81	85	71	80	78	68	75
	Minimum	67	69	62	52	52	55	65	65	65	63	62	60	60	62	63	68	69	67	64	60	50	53	67	64	52	55	57	51	53	50
Mountain Grove §§	Maximum	89	84	68	75	81	87	85	86	77	71	89	85	80	86	87	88	81	74	68	64	73	82	74	80	79	69	74	75	68	66
	Minimum	65	63	63	51	48	58	64	63	67	67	62	60	63	62	66	65	70	65	65	60	51	54	60	63	53	57	59	52	54	52
Neosho	Maximum	87	89	82	79	84	89	88	84	84	75	82	86	83	87	90	93	89	85	75	75	81	87	85	81	85	82	75	74	75	67
	Minimum	66	70	60	47	50	54	60	65	66	64	56	57	63	69	63	64	69	69	66	59	48	55	62	63	53	65	60	51	60	48
Rolla §§	Maximum	90	89	67	71	80	87	80	88	70	69	83	88	83	86	88	90	87	74	61	62	77	84	78	75	80	70	78	77	70	68
	Minimum	69	69	63	56	53	57	61	65	62	64	63	60	62	64	65	67	69	69	62	62	56	57	63	64	65	57	51	52	58	53
Springfield	Maximum	85	85	70	73	79	84	81	82	74	70	78	83	75	83	86	88	82	72	67	66	75	82	75	76	77	72	72	73	65	64
	Minimum	68	70	59	53	55	63	67	65	68	64	62	62	65	64	66	69	68	67	61	57	53	59	61	63	58	61	58	55	55	52
Southwest Plain.																															
Amoret	Maximum	88	85	81	79	86	92	89	81	90	83	84	83	83	88	88	90	91	81	75	78	84	86	84	82	80	75	76	[illegible]	74	69
	Minimum	69	68	57	51	51	62	67	61	61	64	59	60	62	63	65	68	66	66	62	58	51	58	59	59	61	52	58	51	59	44
Clinton	Maximum	84	79	73	87	81	91	83	90	82	78	85	80	78	90	90	92	91	80	71	76	84	87	80	80	82	73	76	79	74	70
	Minimum	70	68	59	51	52	62	68	61	68	65	60	60	62	61	64	67	69	68	50	59	52	55	62	60	52	60	58	51	60	45
Harrisonville §§	Maximum	87	85	72	74	81	89	78	86	76	81	81	76	81	86	88	90	85	77	70	71	80	86	79	74	77	67	73	75	70	67
	Minimum	70	67	59	52	51	56	67	62	65	64	60	60	63	65	64	66	68	69	64	59	53	55	60	60	51	55	58	56	57	46
Lamar §§	Maximum	88	88	72	78	87	90	85	87	75	78	83	85	82	87	91	93	88	80	80	74	82	87	82	78	82	78	75	78	69	69
	Minimum	68	71	60	52	56	57	66	66	68	64	60	61	62	64	64	68	70	69	67	59	52	53	62	62	55	58	61	55	59	49
Lamonte	Maximum	87	82	74	83	82	90	87	89	74	84	87	81	87	84	91	92	87	84	76	78	82	78	78	75	85	69	71	76	69	68
	Minimum	70	68	60	60	67	68	69	67	68	69	65	64	65	67	60	67	63	60	58	59	61	64	62	60	47	60	47	48	46	43
Marshall	Maximum	87	87	75	72	85	86	83	88	78	60	83	82	77	84	89	91	87	72	71	68	80	84	80	75	77	72	75	76	67	67
	Minimum	71	66	58	59	50	68	62	64	63	61	61	60	62	61	64	69	68	65	61	57	50	54	62	53	48	55	55	49	56	45
Warrensburg	Maximum	90	90	73	76	85	91	90	72	81	85	82	81	85	83	93	95	92	73	69	71	84	88	80	77	81	69	74	80	72	67
	Minimum	71	69	58	52	54	64	62	66	65	59	61	64	60	70	65	68	68	67	61	59	53	58	62	59	50	60	57	53	59	45
Warsaw	Maximum	90	90	75	76	84	89	85	88	80	78	82	80	78	87	89	93	92	80	73	67	80	86	79	77	80	72	74	78	70	67
	Minimum	72	67	60	51	48	62	68	63	67	65	58	60	62	62	63	65	70	70	62	59	59	54	62	60	50	62	58	52	62	49
Northwest Plateau																															
Avalon	Maximum	90	85	70	74	84	88	90	89	81	81	85	84	80	86	89	92	80	72	78	69	82	85	82	76	80	74	76	75	67	68
	Minimum	71	70	60	54	57	59	66	65	69	64	70	70	62	69	70	70	69	66	66	60	60	69	66	59	59	58	58	56	59	44
Grant City	Maximum	88	77	67	73	83	88	89	86	81	82	85	85	81	85	89	94	72	70	75	70	84	82	83	74	80	72	76	76	65	65
	Minimum	69	67	54	52	60	63	63	62	63	64	58	60	61	63	62	67	66	63	60	55	56	57	62	55	48	52	55	54	56	42
Kansas City	Maximum	86	82	64	73	84	85	81	83	71	81	83	80	81	84	86	88	78	71	72	74	81	85	82	74	75	69	72	74	69	64
	Minimum	73	64	57	55	58	69	67	67	69	66	65	63	66	68	70	73	70	64	62	60	57	64	64	61	56	61	58	60	54	47
Kidder §§	Maximum	85	84	66	70	79	84	84	83	79	81	81	80	79	83	85	87	76	68	74	72	78	82	80	80	76	71	73	73	67	64
	Minimum	69	69	66	51	54	62	64	65	63	62	60	61	63	62	65	69	68	63	62	67	53	63	65	57	53	62	66	57	59	42
Lexington §§	Maximum	88	87	63	74	83	87	83	88	74	83	84	81	79	86	89	90	88	72	73	72	82	84	79	76	77	70	74	76	71	61
	Minimum	70	70	60	51	54	60	69	64	66	65	59	60	65	62	63	70	67	68	62	61	54	57	63	60	51	62	57	52	62	45
Maryville §§	Maximum	89	79	62	76	84	88	88	87	82	86	84	85	84	89	89	91	83	69	78	76	84	86	83	73	78	78	77	75	68	68
	Minimum	67	66	53	50	53	55	57	61	61	60	58	59	60	62	62	66	66	61	59	54	54	54	58	54	49	50	50	52	56	39
Oregon	Maximum	85	76	68	69	79	82	80	81	78	81	79	75	78	83	85	85	79	72	73	72	77	80	79	75	74	70	71	70	65	61
	Minimum	67	66	53	49	52	60	65	63	62	62	60	60	62	64	63	67	67	61	60	54	53	60	62	55	51	60	54	55	56	41
St. Joseph	Maximum	86	78	62	73	85	86	85	86	81	85	82	81	83	85	88	88	82	71	78	76	81	86	82	70	77	75	76	73	68	67
	Minimum	69	62	55	53	56	60	70	66	66	64	60	63	65	66	65	70	68	64	62	58	56	60	64	58	53	62	59	60	50	46
Trenton	Maximum	88	84	71	71	77	81	86	83	84	80	81	81	81	82	85	88	79	75	75	72	77	80	81	79	75	73	73	75	68	63
	Minimum	70	69	58	54	56	58	65	64	64	63	60	62	63	65	65	76	69	63	63	58	53	68	68	57	52	61	56	56	53	42

[illegible], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charg
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain

OCT 29 1915

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

SEPTEMBER, 1915

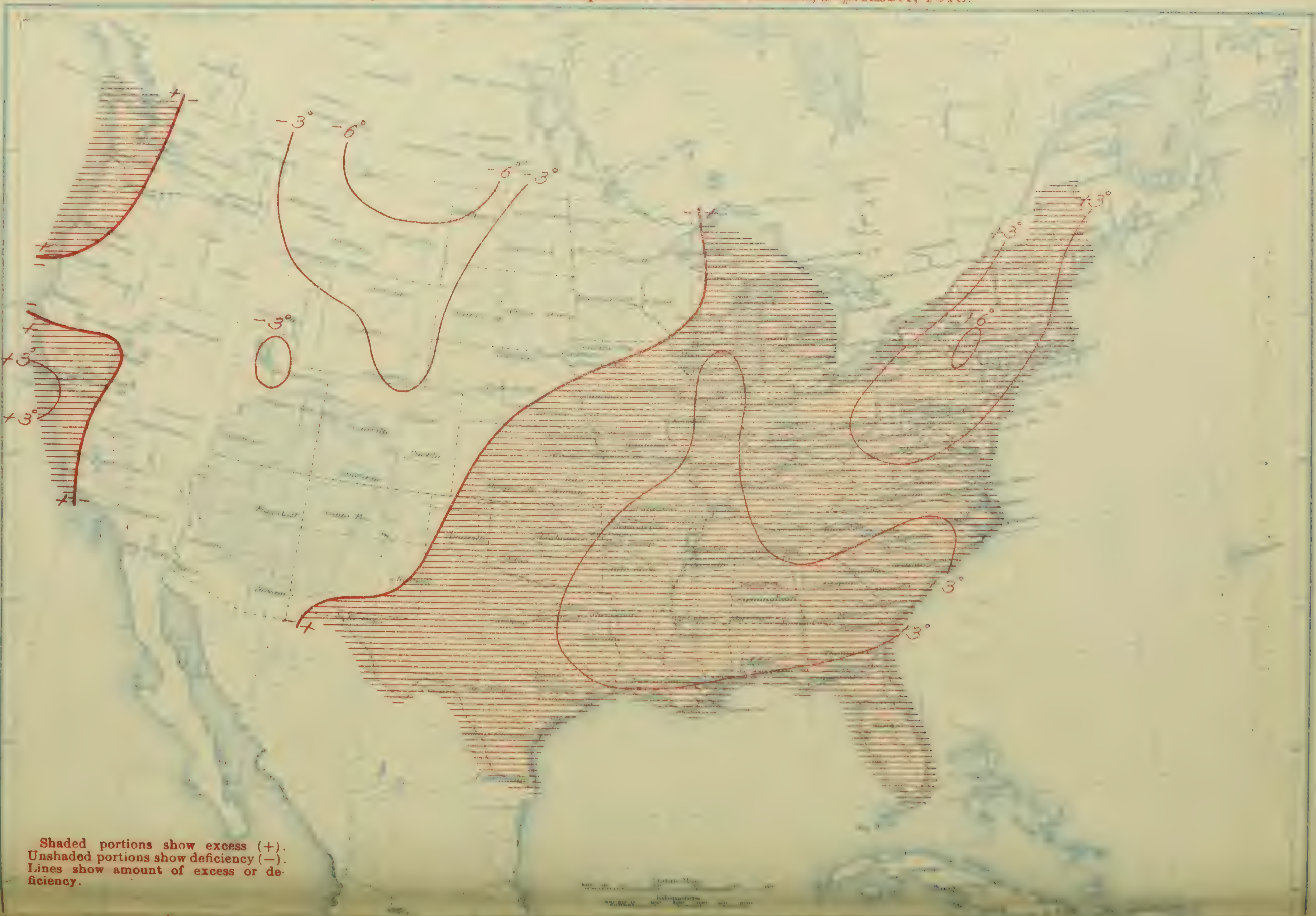
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
OCTOBER 22, 1915

Departure of the Mean Temperature from the Normal, September, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

.. XIX. COLUMBIA, MO., SEPTEMBER, 1915. No. 9

GENERAL SUMMARY.

eptember, 1915, was a cloudy and wet month, except dur-
one or two comparatively short periods, in all save the
theast division. While temperature conditions were gener-
favorable for farm operations, the frequent rains and pro-
ged cloudiness hindered late threshing, haying, and also
wing for fall seeding. The corn crop needed warm, drying
weather, and consequently matured slowly, about one-
rth being still exposed to frost damage at the close of the
nth.

t was the warmest September, viewed as a whole, since
1, and what is more remarkable, it was nearly 1° warmer
n the immediately preceding August, though it must be
n in mind that August, 1915, was notably cool. Cool spells
vailed during the first five days, from the 19th to the 23rd,
during the last three days. The lowest temperatures of
month, with light frosts in all divisions, except the south-
lowlands, occurred during the second period. The remain-
of the month was warm and damp.

he total monthly precipitation was less than normal in the
heast lowlands, and exceeded the normal by only a small
unt in the Ozark plateau, but in the other three divisions
as heavy to excessive. The Osage River and its tributaries
flowed the bottom lands for the fourth time, destroying
y acres of corn that had been planted for the third and
th time.

hile thunderstorms were frequent, damage by hail or light-
was confined to a few localities, and was of small im-
ance.

PRESSURE.

uring most of the first week and the last ten days of the
th high pressure waves dominated, accompanied by the usu-
easant type of early autumn weather; but from about the
to the 19th a series of passing lows, gave much unsettled
her, especially in the western and northern portions of the
. The monthly mean sea-level pressure, however, deter-
d from records of 8 stations, differed but little from the
al.

TEMPERATURE.

e monthly mean temperature, 67 stations reporting, was
°. The mean departure from the normal for 52 stations
ng 10 or more years' record was plus 1.5°. The mean for
ortheast plain was 69.8°, or 1.4° above normal; southeast
nds, 73.6°, or 2.5° above normal; Ozark plateau, 71.1°,
3° above normal; southwest plain, 71.1°, or 1.2° above
al, and northwest plateau, 68.6°, or 1.2° above normal.
peratures of 90 or higher occurred on an average of 3 days,
e State as a whole, but at several stations in the south-
rn lowlands they reached or exceeded this value on 13 to
ys.

HUMIDITY.

e prevailing relative humidity was about normal in the
east lowlands, but in the remainder of the State it aver-
from about 6 to 13 per cent above normal.

PRECIPITATION.

e average precipitation, 79 stations reporting, was 5.25
s. The departure from the normal for 66 stations having
more years' record was plus 1.51 inches. The monthly
ges and departures for the five divisions of the State were
as follows: northeast plain, 5.04 inches, excess 1.19 inches; southeast lowlands, 3.02 inches, deficiency, 0.08 inch; Ozark plateau, 3.99 inches, excess 0.26 inch; southwest plain, 8.42 inches, excess, 4.48 inches, and northwest plateau, 6.68 inches, excess, 2.63 inches. The greatest local monthly precipitation was 12.24 inches, at Lockwood, and the least was 0.71, at Oakfield. The greatest amount recorded in any 24 consecutive hours was 5.91 inches at Lockwood, and 5.90 inches, at Bolivar on the 14th and 15th.

The average number of days with 0.01 inch or more precipitation was 7.

WIND.

The prevailing winds were from the south. Fresh to strong winds prevailed on the 6th, 8th, 10th, 14th and 18th.

SUNSHINE AND CLOUDINESS.

There was more cloudiness than usual. The total number of hours of sunshine was below normal. At Columbia the percentage of possible sunshine was about 10 below normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—19th, 28th and 29th. Frost, light—20th, 21st and 22d. Hail—6th, 8th and 11th. Halos, lunar—19th, 22d, 23d, 25th and 26th. Thunderstorms—6th, 7th, 8th, 9th, 11th, 14th, 15th, 16th, 17th, 18th, 20th, 28th and 29th. They were more or less general on the 8th, 10th, 14th and 18th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	30.05	88	......	219	59	4,964	6.5	26	n	8
Hannibal	30.01	......	......	......	......	5,766	8.0	31	w	8
Kansas City	29.98	83	70	216	58	7,698	10.7	46	nw	8
St. Joseph	29.98	89	72	246	66	.....	....	25	nw	10
St. Louis	30.02	90	72	282	75	8,430	11.7	48	s	14
Springfield	30.02	87	68	268	72	6,639	9.2	28	n	6
Cairo, Ill	30.02	35	71	......	......	5,395	7.5	30	n	18
Keokuk, Iowa	30.02	87	76	250	70	4,859	6.8	33	w	14

COMPARATIVE DATA FOR SEPTEMBER.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	65.2	−3.7	97	28	1.11	−2.56	......	0	4	....	....	....
1889	64.7	−4.2	94	31	4.66	+0.99	......	0	11	....	....	....
1890	63.7	−5.2	98	34	3.98	+0.31	......	0	9	....	....	....
1891	70.6	+1.7	104	30	0.63	−3.04	......	0	6	....	....	....
1892	67.8	−1.1	97	32	2.39	−1.26	3.00	0	4	19	6	5
1893	69.9	+1.0	107	26	3.92	+0.25	5.20	0	6	17	7	6
1894	68.5	−0.4	101	34	4.93	+1.26	3.07	0	5	13	11	6
1895	71.8	+2.9	104	25	2.45	−1.22	6.21	0	4	19	8	3
1896	65.0	−3.9	101	28	4.17	+0.50	4.40	0	10	11	10	9
1897	74.3	+5.4	105	27	0.74	−2.93	2.13	0	2	23	5	2
1898	70.9	+2.0	103	30	6.74	+3.07	6.10	0	9	15	9	6
1899	67.4	−1.5	108	16	2.04	−1.63	3.01	0	4	20	6	4
1900	71.1	+2.2	100	29	4.81	+1.14	3.79	0	10	13	10	7
1901	68.9	0.0	103	27	2.31	−1.36	2.80	0	6	18	8	4
1902	63.2	−5.7	95	30	4.78	+1.11	6.55	0	10	15	6	9
1903	66.4	−2.5	98	32	4.41	+0.74	6.77	0	8	17	6	7
1904	69.6	+0.7	96	34	3.85	+0.18	2.46	0	3	16	8	6
1905	69.6	+0.7	98	41	7.67	+4.00	7.90	0	10	15	6	9
1906	71.9	+3.0	98	36	4.15	+0.48	4.28	0	11	15	8	7
1907	68.9	0.0	101	31	1.93	−1.74	2.25	0	6	18	7	5
1908	71.6	+2.7	99	28	1.80	−1.87	2.68	0	4	18	8	4
1909	68.7	−0.2	105	2[illegible]	4.62	+0.95	4.48	0	8	18	6	6
1910	69.5	+0.6	97	34	5.58	+1.91	4.63	0	10	14	6	10
1911	73.7	+4.6	105	39	7.13	+3.46	7.75	0	11	13	7	10
1912	68.6	−0.3	105	27	3.06	−0.61	3.61	0	6	17	5	8
1913	69.4	+0.5	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+0.5	99	35	6.27	+2.52	9.22	0	9	15	8	7
1915	70.6	+1.5	98	34	5.25	+1.51	5.91	0	7	16	7	7

Climatological data for September, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	6.30	−1.90	3.17	0	10	16	0	14	se	C. Randecker.
Brunswick	Chariton	652	36	69.6	+ 1.4	89	11†	43	21	32	7.05	+3.06	3.65	0	8	12	3	15	e	Louis Benecke.
Columbia	Boone	784	26	70.2	+ 2.4	91	11	44	21	27	6.89	+4.04	3.47	0	12	11	11	8	s	U. S. Weather Bureau.
Fayette	Howard	725	31	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	66.0^{m}	− 3.2	88	6†	39	22	42	6.37	+2.25	3.10	0	6	7^{m}	7^{m}	3^{m}	ne^{m}	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	5.81	+1.59	2.55	0	10	7	7	16	se	J. W. Pulliam.
Hannibal	Marion	534	23	69.2	+ 1.3	89	10	43	22	32	7.16	+3.60	2.35	0	11	11	12	7	sw	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	.	1.94	−2.13	0.51	0	11	8	7	15	se	C. T. Mauthund.
Jefferson City	Cole	628	30	71.0	+ 2.0	90	11†	44	22	32	3.18	+0.09	1.37	0	8	18	0	12	s	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	9.34	......	4.22	0	7	....	....	....	..	J. T. Dewey, M. D.
Louisiana	Pike	500	38	69.8	+ 2.0	90	12†	44	21	39	4.76	+1.43	2.52	0	4	21	6	3	se	I. T. Farrell.
Macon	Macon	881	18	68.5	+ 0.3	89	10†	41	21	35	6.30	+2.29	3.21	0	9	12	11	7	sw	John A. Cook.
Mexico	Audrain	797	38	69.5	+ 0.8	92	12†	40	22†	38	7.56	+3.60	2.66	0	12	14	0	16	s	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	71.8	+ 1.2	91	11†	42	21	27	0.71	−3.28	0.34	0	6	11	17	2	s	E. E. Stennes.
Palmyra	Marion	652	4	68.3	.....	90	10†	39	22	35	6.89	+3.27	2.58	0	6	11	12	7	se	W. B. Markell.
St. Catherine	Linn	914	3	68.4	.....	86	13	41	21	28	6.29	....	1.95	0	9	12	15	3	s	L. D. Baker.
St. Charles	St. Charles	614	38	72.0	+ 5.6	92	14	43	21	34	1.50	−1.21	1.15	0	4	13	7	10	s	L. C. Saeger.
St. Louis (1)	St. Louis City	717	15	72.4	+ 2.4	91	12	47	21	22	1.41	−1.50	0.61	0	8	11	13	6	s	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	72.3	.....	91	12†	46	21	24	1.17	.....	0.53	0	10	16	9	5	s	St. Louis University.
Steffenville	Lewis	576	23	71.0	+ 2.4	92	12	44	30	40	7.79	+3.34	2.85	0	9	12	11	7	e	Frank Hall.
Unionville	Putnam	1,072	23	67.0	− 0.4	88	12	37	22	36	4.32	0.32	1.70	0	8	11	3	16	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	...	4.90	...	1.60	0	3	..	...		....	C. B. Ellis.
Warrenton	Warren	865	25	70.8	+ 1.9	91	11†	42	21	31	3.23	−0.62	2.10	0	9	12	6	12	s	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	...	.....	....	....	....	....	....	.....	......	....	....	...	...	...	....	. . .	D. L. Albert
Cardwell	Dunklin	225	5	73.6	.....	95	13	43	22	37	1.39	......	1.10	0	4	24	2	4	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	75.8	+ 2.8	94	13†	51	22†	29	1.28	−1.90	0.56	0	3	25	1	4	e	H. E. Averill.
Doniphan	Ripley	440	11	72.1	+ 0.8	90	11†	41	22	30	2.30	−1.47	0.80	0	4	23	2	5	sw	W. W. Martin
Jackson	Cape Girardeau	458	25	73.5	+ 3.7	95	13†	40	22	27	2.76	−0.83	1.30	0	5	17	7	6	s	L. M. Bean
Marble Hill	Bollinger	420	24	73.0	+ 2.3	93	11†	40	22	35	3.43	−0.26	1.72	0	5	19	10	1	s	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	3.70	+0.37	1.50	0	5	24	1	5	se	Miss Josie Smith.
Patton (near)††	Bollinger	430	1	....	.....	....	....	....	....	....	3.30	......	2.00	0	3	20	0	10	s	George F. Ellis
Poplar Bluff	Butler	333	12	72.4	+ 0.4	93	13†	43	22†	34	3.12	−0.05	1.75	0	5	18	6	6	.....	Albert E. Cox
Sikeston	Scott	328	15	74.4	+ 3.7	95	12†	44	22	36	4.81	−1.83	2.09	0	6	21	7	2	sw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	73.8	+ 3.6	92	13	49	22	22	4.16	+1.69	1.68	0	4	15	10	5	s	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.60	−2.10	0.56	0	7	18	1	11	s	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	3.39	......	1.67	0	8	13	7	10	e	Mrs. Nellie A. Houser
Birchtree	Shannon	1,200	22	71.0^{g}	+ 1.1	89	12†	44	20	30	2.22	−1.25	1.35	0	5	24	3	3	s	V. H. Kirkendall.
Bolivar	Polk	1,020	28	71.3	+ 0.9	91	11	42	21	37	11.16	+7.69	5.90	0	8	19	8	3	se	A. C. Fink.
Cassville	Barry	1,500	5	71.0	.....	90	11†	39	23	34	5.15	......	1.98	0	7	21	6	3	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	70.7	.....	90	12†	47	1†	33	2.72	......	1.04	0	5	26	1	3	......	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	72.4^{a}	+ 1.1	92	11	43	1	38	5.57	−2.29	2.35	0	10	22	1	7	sw	H. E. Dean.
Eldon	Miller	934	15	69.7	.....	91	4	40	21†	36	3.09	−0.70	1.42	0	8	17	13	0	s	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	72.3	.....	91	13	40	1	30	2.09	......	1.35	0	3	25	4	1	ne	R. C. Walton.
Gano‡‡	Dent	1,250	12	71.0	+ 0.6	92	11	37	22	34	1.74	−3.16	0.95	0	6	17	8	5	s	A. C. Leach.
Goodland	Iron	1,000	11	69.0	+ 0.5	91	11	36	22	37	0.92	−4.14	0.47	0	3	16	12	2	s	F. M. Adams.
Hollister	Taney	1,000	7	72.4	.....	94	9†	40	22	36	2.15	1.94	1.25	0	3	23	0	7	sw	W. P. Chapmann
Houston	Texas	1,280	23	70.2	+ 1.4	89	12	40	22	31	2.79	−1.20	1.25	0	6	21	4	5	sw	R. F. Harmon.
Ironton	Iron	925	38	70.0	+ 2.3	91	11	34	22	38	2.93	−0.56	1.25	0	4	10	12	8	n	W. H. Delano.
Koshkonong	Oregon	911	15	72.6	+ 1.5	90	11†	44	22	29	1.37	−2.26	0.53	0	5	20	7	3	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	71.8	+ 1.8	93	17†	35	22	42	4.32	−0.49	1.55	0	11	15	6	9	sw	O. L. Weissgerber.
Lockwood	Dade	1,088	21	72.0^{d}	0.0	90	11	44	21	27	12.24	+8.60	5.91	0	6	16^{a}	9^{a}	4^{a}	ne	C. S. Crow.
Mountain Grove	Wright	1,490	17	64.7	+ 0.8	88	11†	42	21	33	2.60	−1.57	1.03	0	7	13	12	5	s	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	71.7	+ 0.2	95	27	43	21	32	6.85	+3.33	1.77	0	9	16	10	4	se	J. R. White & Son.
Neosho	Newton	1,083	33	72.0	+ 1.6	92	11	43	22	35	7.05	+2.96	2.39	0	9	23	2	5	sw	W. O. Buck.
Rolla	Phelps	1,139	34	70.4	− 2.7	98	14	37	22	37	2.68	−1.12	1.24	0	7	16	11	3	s	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	70.7	+ 2.8	87	11	45	21	22	3.06	−0.70	1.34	0	9	17	10	3	s	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	......	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	71.8	.....	93	11†	45	22	33	8.21	......	2.45	0	11	14	5	11	sw	Darby Fruit Farm.
Clinton	Henry	800	29	71.2	.....	93	11	41	21	34	6.62	+3.21	1.80	0	8	14	2	14	sw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	69.6	+ 1.3	91	11	42	21	32	9.71	+5.43	3.55	0	13	10	2	18	sw	A. J. Sharp.
Lamar	Barton	964	35	72.3	+ 1.9	92	11	44	21	36	11.54	+7.41	4.42	0	11	15	3	12	s	E. H. Adams.
Lamonte	Pettis	863	27	71.4	.....	92	2†	40	21	42	6.88	+2.63	1.90	0	10	14	13	3	sw	J. Ed. Hall.
Marshall	Saline	779	25	69.8^{d}	+ 1.2	90	10†	39	21	32	9.53	+5.12	3.28	0	11	20	6	4	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	70.6^{m}	.....	89	14	42	21	....	7.26	+3.01	3.90	0	9	19	7	4	sw	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	9.65	+5.82	3.40	0	9	16	1	13	se	W. E. Mathews
Warrensburg	Johnson	883	37	71.4	+ 1.5	95	11	40	21	34	8.67	+5.49	2.39	0	9	13	12	5	sw	Geo. H. Collins.
Warsaw	Benton	883	11	71.7	+ 0.3	93	11	43	21†	36	6.85	+2.22	2.60	0	12	14	14	2	sw	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	7.71	......	2.38	0	9	10	10	10	sw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	70.2	+ 1.2	89	12	40	21	34	6.88	+1.30	4.15	0	5	20	5	5	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	68.2	+ 1.7	90	12	37	21	38	4.36	+0.72	2.65	0	9	11	10	9	se	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	7.40	+0.92	3.68	0	8	14	0	16	......	Hocey O. Dupy
Conception	Nodaway	982	31	66.4	− 0.4	87	12†	40	21	27	5.69	+2.04	1.62	0	11	8	14	8	se	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	68.0	+ 1.1	91	12†	39	21	32	6.91	+3.12	1.80	0	9	16	4	10	s	W. H. Campbell.
Kansas City	Jackson	963	27	70.0	− 2.5	89	12	47	21	23	5.88	+2.12	1.71	0	13	14	5	11	s	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	68.8	+ 1.4	87	12	41	21	30	8.50	+4.60	2.25	0	10	13	7	10	sw	J. F. Sharp.
Lexington	Lafayette	813	31	70.2	+ 1.9	90	10	43	21	31	8.58	+4.12	2.74	0	11	15	0	15	s	J. W. Keithley.
Liberty	Clay	864	27	70.5	+ 1.4	91	11†	43	21	35	8.56	+4.83	1.82	0	11	9	18	3	s	W. C. Wilmott.
Maryville	Nodaway	1,160	25	67.0	+ 1.0	91	7	38	21†	38	6.97	+3.31	2.05	0	13	15	3	12	s	J. R. Brink.
Oregon	Holt	1,113	60	66.8	− 0.2	86	12†	39	21	25	6.31	+2.84	2.17	0	9	10	12	8	se	Tom Curry.
St. Joseph	Buchanan	967	14	69.6	.....	91	12	44	21	29	4.30	+1.22	1.09	0	15	13	9	8	s	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	67.8	.....	89	12	38	21	31	6.06	......	1.97	0	9	13	10	7	se	John F. Frazier.
Trenton	Grundy	812	21	68.8	+ 1.4	86	12†	41	21	24	7.11	+2.95	2.69	0	8	15	5	10	ne	W. H. Estes.
State means and extremes		......	...	70.6	+ 1.5	98	14	34	22	42	5.25	+1.51	5.91	0	7	16	7	7	s	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports a used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for September, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ast Plain.																																	
	Missouri							.24		3.17		.52	.05			1.30	.47	T.	.30		.04	.16				T.	.05						6.30
k	Grand							.05		3.65		.65				1.50	.73		.19			.10							.18				7.05
a***	Missouri						.07	.01	1.92	1.55		1.43			.79	.74	.06	T.	.03		.27			T.	T.	.01	T.	.01	T.				6.89
	do																																
	do						.16		.60			1.15			3.10	.16					1.20					T.							6.37
	Mississippi							.14	1.29	.05	2.55				1.08	.31	.15	.24								.09		.01					5.81
al***	do						T.	.32	1.26	.35	.62	1.17			1.61	.98		.02	.75		.06					T.	.02	T.	T.				7.16
n	Missouri							.14		.19	.25	.04	.02			.48	.10	.16	T.		T.	.51						.02	.03	T.			1.94
n City	do							.83		.01		.02				1.37		.28				.32			.30				.05				3.18
ille	Chariton							T.		4.22		2.10			2.24		.36	.25								.07			.10				9.34
a	Mississippi									1.60					T.	2.52	.14									T.	T.	T.					4.76
	Chariton							.05		3.21		.86				1.44	.37	.03	.29								.04	.01					6.30
	Mississippi							.30		2.66	.10	.80	.10			1.90	1.09		.40		.02	.14			.04		.01	T.	T.				7.56
	Meramec					.04	.15	.10	T.	T.						.05	.03				.34			T.		T.		T.	T.		T.		0.71
	Mississippi									1.90		2.58				1.64	.04	.42	.31														6.89
rne	Grand							.40	1.95	.80	T.	1.32			.27	.69	.54		.21							.11	T.						6.29
les	Missouri						.10	T.		.10						.15	T.				1.15						T.		T.				1.50
(1)***	Mississippi						.01	.04				T.				.29	.43	.01	.01		.61						.01	T.	T.		T.		1.41
(2)	do						.03	.14								.13	.27	.02	.02		.53						.01	.01	.01		T.		1.17
	do							.26	1.60	1.26	2.85				.50	1.12	.05	.10	.05		T.					T.	T.						7.79
lle	Grand							T.		.80	T.	.20				.90	.80		.76							T.		.30	.06				4.32
a	Mississippi						.15				1.60					3.15			T.								T.		T.				4.90
	do					.12		.08			.58	.04	.05			.15		.10				2.10							.01				3.23
st Lowlands.																																	
rdeau	Mississippi																																
	do																		T.		.04			.03		T.	T.	1.10			.22		1.39
sville	do		T.																T.		.37			T.					.35		.56		1.28
	Black																.52		.23		.80			T.							.75		2.30
	Mississippi						T.									.12	.04		.35		.95							1.30					2.76
ill	do																	.30	.02		1.04								1.72		.35		3.43
rid	do																	.01		.14		1.10								1.50	.95		3.70
ar	do							.60													.70							2.00					3.30
aff	Black																T.	.15	T.	.53		1.75							.19	.50			3.12
	Mississippi					.01											.01	.30			2.09								.70		1.70		4.81
***	do																		.35		1.68							T.	1.01		1.12		4.16
teau.																																	
	Gasconade							.35	.06							.56		.12			.25	.11						.15		T.			1.60
	Osage							.61								1.67	.11	.21	T.		.11	.29			.30				.09				3.39
	Black															.18	.06			1.35		.13							.50				2.22
	Osage						.86	1.96								5.90	.80				.38			.35				.16	.75				11.16
	White																	.52	.01			1.98			1.17	.07	T.	.79		.61			5.15
	Gasconade						.30	.60													1.04			.46				.32					2.72
	Neosho									T.					.30	.38	2.35	.01	.02		.70			1.26			.08	.30	.17	T.			5.57
	Osage						.25								1.42	.08	.15	.13			.65			.16					.25				3.09
	Black															.04					.70								1.35	T.			2.09
	Meramec						T.	.03								.38	T.	.23			.95			.07				T.	.08				1.74
	Black															.20	.47	.25															0.92
	White																.25				1.25			.65									2.15
	Gasconade						.69	T.								T.	.37	.10			1.25			.15					.23				2.79
	Mississippi							T.									T.	.30	.68		T.	1.25			T.				.70				2.93
ong	Black						.04											.14			.47			.19					.53				1.37
	Osage							1.55	.05							.50		.10			.60	.60		.05	.24			.16	.46	.01			4.32
l	do							4.23								5.91					1.19			.60			T.	.19	.12				12.24
Grove	White							.76	.27									.26	.06		.46	.52		T.	.27			T.		T.			2.60
rnon	Neosho							1.77							.12	1.16	.86		T.		1.55			.93	.10			.30	.06				6.85
	do							T.		.07					T.	1.34	.50	.01	.10		1.21			1.30			.13	2.39					7.05
	Meramec							.06	.10							.48					.08	1.24			.12				.60				2.68
l***	White						.09	1.25							T.	.11	.53	T.	.01		.84			.18		T.	.02	.03					3.06
d	Osage																																
st Plain.																																	
	Osage						.27	1.38		.46					2.15	2.45	.55	T.	.25		.28			T.	.14	.26			T.	.02			8.21
	do							1.80		.27					1.15	1.35	1.40		.15	.20						.30							6.62
ville	do							1.76		3.55		.05				2.07	1.23		.20	.03	.46	.08			.01	.18	.06		T.	.03			9.71
	Neosho							4.42		.05						2.46	1.39	.68	.13		.34			.03	.36	T.		.07	1.61	T.			11.54
	Missouri						.15	.55		1.75		.05			1.90	.95	.38		.45		.45			T.		.25	T.		T.				6.88
	do						.24	.20	T.	3.28	T.	1.13			2.50	.44	.82	T.	.30		.11					.11	T.		.40				9.53
	Osage						.20	3.90		.03					.37	1.91			.15		.30						.15	.25					7.26
	do							3.40								2.07	1.27	1.65			.37	T.			.30	.05		.07	.47				9.65
urg	Missouri						.91	.60		1.60					2.39	1.99	.54		.31		.15					.18	T.		T.				8.67
	Osage						.82	.72				T.			.25	2.60	1.25	.20	.15	.08	.55			.08		.05		.10	T.				6.85
	Missouri							.33		2.38		1.41				1.26	.60		.61		.10						.10		.92				7.71
st Plateau.																																	
	Grand								4.15		1.25				.25	.80	.43									T.							6.88
	do						.04		.55			.07			2.65	.05	.19								.04	.47	.30	T.					4.36
e	do							.72		3.68		.69				1.10	.35		.38								.23		.25				7.40
n	Missouri						.18		1.30	.05		T.			.80	.20	.04		.95						T.	1.62	.46		.04	.05			5.69
	Grand						T.	T	1.56		.25	.75	T		.11	.06	.18		1.80							1.60	.60	T.	T.	T.			6.91
ty***	Missouri						.94		1.14	.57	.06				.98	1.17	.04	.03	.33						.03	.50	.01			.08			5.88
	Grand							.20	.05	2.25		2.00				2.15	.75		.33		.04						.58		.15				8.50
ll	Missouri							.23		2.74		1.47				.90	.87	.03	.97		.31				.02		.30		.74				8.58
	do						.39	.66	1.82	1.57		.25			.15	1.10	1.63	.06			.48				T.	.45	T.		T.	T.			8.56
	do							.24	.05	1.60	.05				T.	.29	.40		1.68	T.	.03				T.	.45	2.05		.03	.05	.05		6.97
	do						.40		1.60		T.	T.			.56		.37		.80	.17							2.17		.18	.06	T		6.31
***	Missouri						.27		.09	.05	.69	.02			.86	.11	.28	.14	.57		.02			T.	.01	.81	.29		T.	.09	T.		4.30
	do						.19		1.30						.08	.06	.11		1.68							1.97	.57			.10			6.06
	Grand						T.		2.69	T.	.16				1.18	1.99	.08	.39						T.		.55	T.	T.	.07				7.11

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ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the servation.

recipitation measured in the morning: amount then recorded is for the preceding 24 hours.

race, or less than 0.01 inch.

Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

ecipitation in the next following measurement.

parate dates of fall not recorded.

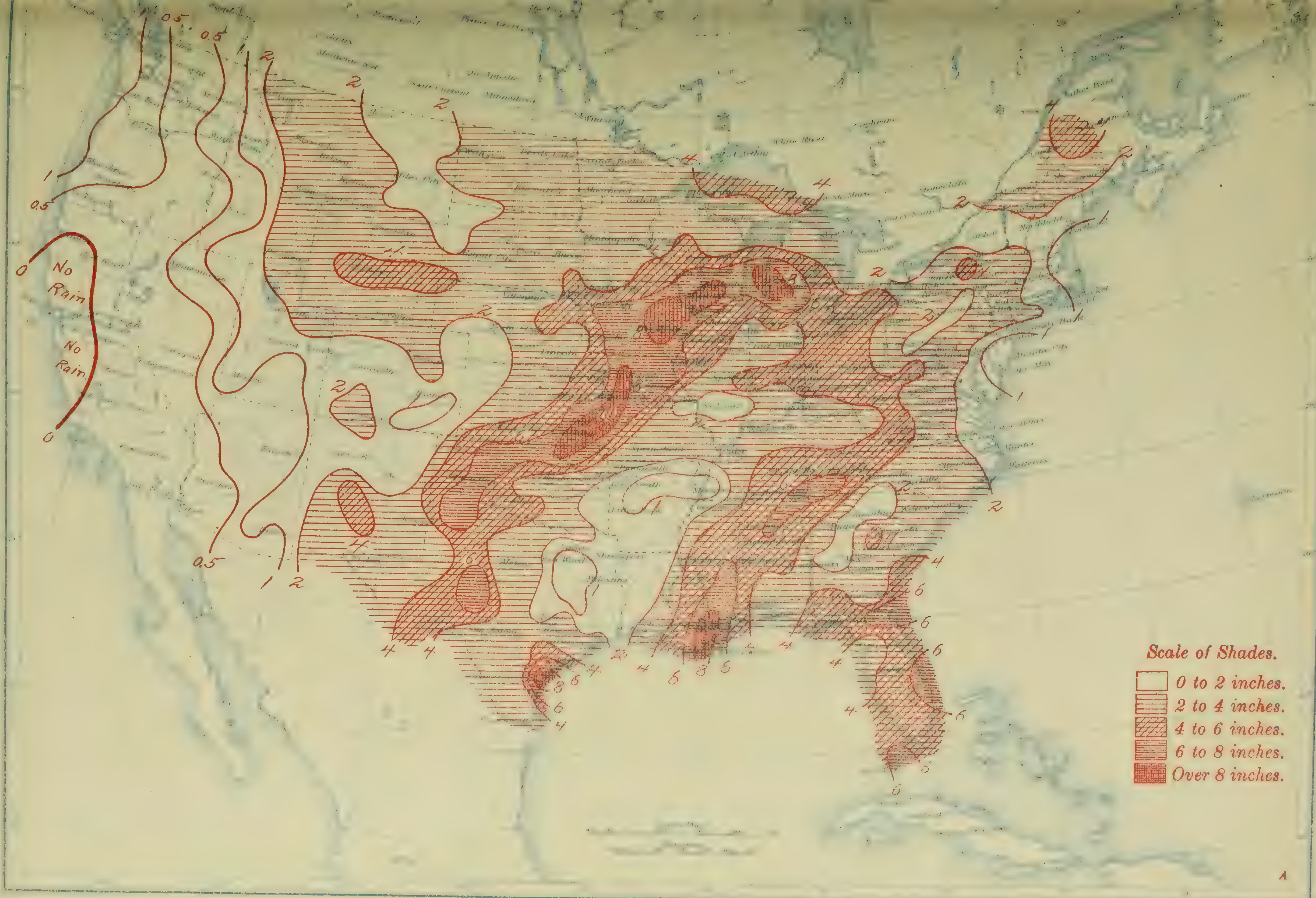
Daily temperatures for September, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	77	80	83	84	84	82	87	85	78	88	89	89	88	80	73	83	85	83	83	72	68	69	66	80	76	81	80	65	75	73	....
	Minimum	45	51	56	58	59	63	65	66	65	65	70	71	73	74	64	63	65	66	59	63	43	44	45	55	61	65	60	55	54	49	....
Columbia	Maximum	77	82	87	82	83	85	87	89	83	89	91	89	89	87	76	85	86	81	85	73	65	68	61	78	80	79	79	66	72	70	....
	Minimum	51	57	58	55	60	61	66	64	64	71	67	71	71	67	66	70	67	65	61	49	44	47	52	60	65	70	59	57	52	47	....
Fayette	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum	77	82	81	80	81	83	86	87	79	89	88	89	89	88	77	84	82	80	83	72	64	68	71	78	77	80	64	66	69	69	....
	Minimum	48	50	54	56	58	60	67	64	64	68	66	73	73	68	67	73	69	66	61	49	44	43	53	59	62	60	56	56	51	47	....
Jefferson City §§	Maximum	79	82	81	83	83	85	87	88	88	89	90	90	89	89	83	87	86	86	86	73	65	70	62	80	83	82	85	68	72	72	....
	Minimum	47	53	57	57	58	62	63	67	65	67	69	69	70	74	67	67	68	67	61	67	45	44	48	53	60	64	68	59	54	48	....
Macon §§	Maximum	79	83	80	83	83	84	87	87	78	89	88	89	89	83	74	83	86	81	82	71	66	69	70	81	77	77	71	66	73	71	....
	Minimum	44	50	53	55	60	60	61	64	63	64	67	68	70	71	61	61	68	65	57	62	41	42	43	53	59	64	57	55	50	44	....
Mexico §§	Maximum	79	82	81	83	83	86	88	91	84	91	91	92	92	91	82	86	86	85	86	74	66	71	69	83	83	80	73	65	71	70	....
	Minimum	41	47	47	59	55	59	59	65	64	64	67	67	67	71	66	66	67	66	59	61	41	40	40	51	59	64	65	54	49	45	....
Oakfield	Maximum	78	83	82	83	84	88	88	89	89	89	91	91	91	90	88	89	87	86	87	72	65	68	71	81	84	87	81	69	73	69	....
	Minimum	51	58	58	59	62	62	65	70	64	67	68	70	69	75	67	70	69	69	61	58	42	46	48	54	62	70	66	58	50	47	....
St. Catharine	Maximum	76	80	82	84	82	81	82	83	75	85	83	85	86	79	69	80	85	81	79	73	65	65	70	78	74	77	75	66	68	67	....
	Minimum	50	54	57	56	59	61	64	61	63	68	67	69	70	68	61	67	75	63	56	56	41	56	50	57	63	68	56	53	51	47	....
St. Louis (1)	Maximum	76	82	81	81	83	82	86	89	86	89	89	91	90	89	88	85	85	83	85	73	63	68	72	79	83	85	77	70	72	68	....
	Minimum	56	61	65	65	64	67	68	69	68	70	71	73	70	75	70	70	72	72	67	52	47	52	53	58	61	71	63	59	53	50	....
Unionville §§	Maximum	80	82	86	84	85	84	86	84	80	86	84	88	87	80	76	80	86	82	80	68	70	68	72	80	71	70	68	66	74	75	....
	Minimum	44	50	52	53	52	56	60	63	62	60	64	65	70	71	54	57	60	61	50	56	46	37	44	50	60	62	54	52	50	44	....
Warrenton §§	Maximum	80	83	82	81	84	84	89	90	87	90	91	91	91	90	87	88	87	84	88	70	65	70	72	81	80	83	77	65	70	62	....
	Minimum	49	54	60	58	61	62	64	68	65	64	67	69	68	71	66	69	68	70	62	66	42	43	48	51	60	65	66	58	49	45	....
Southeast Lowlands.																																
Cardwell	Maximum	80	82	85	90	92	90	89	88	89	88	93	92	95	92	92	93	94	93	88	85	74	72	67	82	96	92	82	80	75	78	....
	Minimum	52	56	60	60	65	65	66	68	66	66	65	66	67	70	68	68	68	68	64	63	52	43	45	50	53	58	68	60	60	53	....
Caruthersville	Maximum	83	87	86	87	86	88	91	91	87	92	93	93	94	91	92	93	94	91	90	81	75	74	71	85	87	88	91	84	75	70	....
	Minimum	58	63	64	59	64	64	68	68	68	70	71	71	74	75	73	71	72	71	61	66	53	51	51	61	61	68	72	69	63	60	....
Doniphan	Maximum	78	83	88	84	85	88	89	89	87	89	90	90	90	89	89	90	88	88	85	80	72	68	63	79	83	86	90	81	74	69	....
	Minimum	48	56	58	57	60	59	64	65	66	64	67	65	68	73	67	67	67	66	61	66	48	41	47	52	56	63	67	68	61	54	....
Jackson	Maximum	81	85	85	85	87	90	89	91	90	90	93	94	95	91	93	92	93	95	90	80	74	72	72	82	84	89	91	80	74	69	....
	Minimum	48	48	58	57	61	60	67	69	70	68	73	70	72	75	71	70	69	70	60	61	46	40	48	48	60	67	70	61	44	51	....
Marble Hill	Maximum	82	87	87	85	85	89	87	91	89	90	93	92	93	90	91	90	92	91	90	74	74	73	65	73	85	88	92	77	76	66	....
	Minimum	47	54	56	54	65	60	67	67	68	64	68	67	72	74	67	66	68	67	68	64	46	40	46	60	65	67	67	63	55	53	....
Poplar Bluff §§	Maximum	74	81	87	86	86	87	90	90	91	90	91	92	93	93	91	91	92	91	91	92	78	69	72	70	83	83	89	93	72	76	....
	Minimum	45	50	58	59	59	60	60	65	65	65	65	67	67	67	67	67	67	66	66	63	48	43	43	48	53	53	55	69	61	59	....
Ozark Plateau.																																
Birchtree	Maximum	78	....	84	83	....	87	87	87	....	....	88	89	89	86	86	87	....	86	76	67	59	77	81	....	....	85	86	76	78	67	....
	Minimum	48	....	56	57	....	59	65	67	....	....	64	67	68	67	67	67	....	60	64	44	51	50	60	....	....	66	66	65	64	54	....
Cassville	Maximum	70	81	70	85	84	87	88	87	84	88	90	87	86	88	85	87	86	86	87	90	78	71	65	63	80	79	89	87	86	84	....
	Minimum	40	48	55	56	64	73	64	66	59	63	60	59	58	60	68	66	65	63	61	56	64	43	39	52	51	72	63	64	62	64	....
Eldon	Maximum	....	....	....	91	84	85	85	87	86	89	85	88	87	87	78	86	85	83	84	72	64	76	70	80	83	86	85	72	72	70	....
	Minimum	48	46	56	55	55	60	62	60	64	68	60	67	67	65	65	69	66	65	58	56	40	40	40	54	61	67	56	54	54	58	....
Fruit City	Maximum	68	73	83	82	85	85	87	89	90	89	90	90	91	90	88	87	85	89	88	75	65	69	64	80	82	85	86	80	73	65	....
	Minimum	40	58	60	62	64	68	70	69	70	76	70	68	72	69	70	65	60	71	65	64	45	45	54	50	61	64	68	64	63	54	....
Gano	Maximum	78	83	80	82	84	85	89	89	89	89	92	91	90	88	90	91	87	85	88	73	66	71	67	81	84	87	89	77	74	66	....
	Minimum	45	52	56	56	58	59	63	67	63	66	67	67	68	72	65	69	66	66	59	63	42	37	48	52	60	67	65	62	51	47	....
Hollister	Maximum	82	86	88	88	90	82	82	92	94	94	92	92	90	88	90	88	90	88	92	82	72	80	60	72	88	86	90	84	80	76	....
	Minimum	46	50	54	52	60	62	56	70	64	66	68	62	58	60	58	60	64	60	58	56	64	40	54	60	70	62	66	68	60	58	....
Ironton §§	Maximum	79	84	85	85	84	87	87	88	88	88	91	90	90	88	90	89	87	87	85	76	65	69	70	80	84	86	85	73	74	62	....
	Minimum	41	48	52	51	56	56	63	67	64	62	66	67	65	72	66	67	67	65	55	60	42	34	45	50	54	67	62	63	49	52	....
Lebanon §§	Maximum	83	87	88	88	89	89	88	89	90	88	91	92	89	90	88	90	93	91	93	76	71	73	60	81	85	79	91	71	81	77	....
	Minimum	41	53	55	54	55	60	63	63	66	68	68	68	68	70	64	64	66	67	60	66	40	35	40	53	54	67	67	65	60	48	....
Mountain Grove §§	Maximum	76	81	84	82	83	85	84	85	85	86	88	86	87	86	84	87	88	87	85	74	65	66	58	76	80	80	86	78	76	67	....
	Minimum	43	52	55	54	55	55	64	66	66	65	67	67	65	68	66	67	65	67	57	65	42	43	48	51	55	63	65	65	56	50	....
Neosho	Maximum	79	84	84	83	84	89	85	88	88	90	92	90	90	85	81	85	87	88	89	81	73	70	63	82	84	81	87	85	76	73	....
	Minimum	44	49	53	54	54	59	64	66	64	67	66	68	70	72	67	68	65	66	61	66	46	43	52	53	65	68	67	65	66	53	....
Rolla §§	Maximum	80	85	80	82	81	87	88	88	90	89	90	91	89	98	78	88	88	85	88	72	66	65	63	80	83	85	87	67	75	62	....
	Minimum	45	48	52	56	52	60	64	65	64	65	69	67	69	71	65	66	68	67	60	68	39	37	45	53	60	64	66	67	53	49	....
Springfield	Maximum	74	80	79	81	82	83	84	86	84	86	87	86	86	85	83	80	83	82	83	72	62	64	56	76	81	78	82	79	75	70	....
	Minimum	54	59	64	61	62	65	62	69	69	68	69	69	69	71	68	68	66	67	64	55	45	48	52	55	66	67	67	65	59	50	....
Southwest Plain.																																
Amoret	Maximum	81	82	87	87	88	79	87	89	86	90	93	93	91	88	84	86	85	86	86	84	68	72	69	81	82	85	85	78	75	73	....
	Minimum	48	52	57	58	56	62	63	68	64	68	70	69	71	66	63	66	68	63	60	60	41	45	54	54	64	65	56	59	66	49	....
Clinton	Maximum	82	84	86	86	80	89	88	89	87	91	93	90	91	84	75	87	85	87	89	71	63	65	73	85	81	87	91	80	80	75	....
	Minimum	54	54	58	55	60	57	54	56	65	69	72	68	70	66	65	69	55	64	59	60	41	53	43	53	58	69	61	60	60	48	....
Harrisonville §§	Maximum	79	80	83	85	86	74	88	87	81	90	91	90	90	80	74	83	84	81	85	72	65	72	62	76	76	85	81	70	70	66	....
	Minimum	47	53	58	58	59	58	64	64	65	65	70	70	71	71	64	67	68	65	59	60	42	45	49	57	58	64	57	58	57	51	....
Lamar §§	Maximum	81	84	85	86	88	84	88	89	86	91	92	90	90	84	88	88	85	87	89	75	68	71	61	81	84	84	91	84	78	75	....
	Minimum	47	48	58	56	57	63	64	64	68	68	70	70	69	71	65	63	69	64	63	65	44	45	52	54	58	67	70	64	64	51	....
Lamonte	Maximum	89	92	83	85	87	83	89	84	87	91	90	91	92	86	84	89	88	88	85	72	76	70	66	72	77	82	87	73	75	78	....
	Minimum	47	53	46	59	63	61	60	58	62	71	59	67	71	65	67	70	64	65	67	58	40	41	54	62	52	68	69	55	57	61	....
Marshall	Maximum	79	....	83	84	83	85	87	87	82	90	90	89	88	84	74	84	86	82	86	73	67	69	65	80	78	80	81	69	75	71	....
	Minimum	47	....	53	57	59	59	64	68	64	68	68	69	71	66	65	66	64	64	60	61	39	41	50	55	60	69	59	55	54	43	....
Warrensburg	Maximum	82	86	85	85	88	81	90	92	87	93	95	93	93	83	73	88	90	85	88	74	67	75	68	85	78	86	87	69	76	71	....
	Minimum	48	54	57	56	56	62	64	68	64	70	70	70	70	67	65	67	66	64	61	58	40	41	51	53	63	62	58	56	58	48	....
Warsaw	Maximum	80	84	86	85	86	85	88	90	87	91	93	90	91	88	75	88	86	83	88	75	65	71	65	83	85	83	87	80	78	75	....
	Minimum	44	50	54	53	54	58	64	65	67	68	70	62	70	70	65	70	66	65	62	63	43	43	56	55	65	71	66	61	63	50	....
Northwest Plateau.																																
Avalon	Maximum	80	84	85	86	86	84	87	82	77	88	87	89	88	84	70	82	87	84	84	77	69	70	70	80	74	82	78	70	72	71	....
	Minimum	48	50	55	58	61	62	65	68	65	65	65	70	71	65	60	66	70	70	58	60	40	45	50	60	60	70	63	56	60	50	....
Grant City	Maximum	80	84	83	84	86	79	90	86	76	85	85	91	91	81	64	81	85	82	80	71	66	69	76	75	69	77	69	72	64	65	....
	Minimum	48	54	59	58	59	61	62	64	58	67	61	65	69	63	62	61	62	59	54	52	39	42	55	58	62	65	58	58	52	51	....
Kansas City	Maximum	77	80	82	84	86	74	86	87	74	88	89	89	89	77	70	81	79	81	84	73	63	69	68	74	75	85	77	62	62	66	....
	Minimum	56	60	65	64	63	66	66	66	65	72	71	74	74	64	62	67	69	65	63	50	47	50	57	58	65	68	58	57	57	51	....
Kidder §§	Maximum	79	82	82	83	84	72	85	79	74	86	84	87	86	79	69	78	83	79	82	66	66	67	71	76	72	82	73	67	63	67	....
	Minimum	49	55	60	57	61	64	64	72	63	70	69	70	71	70	59	66	65	62	60	65	41	45	56	58	65	69	55	54	56	50	....
Lexington §§	Maximum	78	83	85	85	85	80	86	86	78	90	89	89	88	80	72	84	84	83	85	72	67	70	68	80	78	83	78	63	69	70	....
	Minimum	49	52	56	55	56	61	65	71	64	70	69	72	71	73	64	68	65	65	58	67	43	44	53	56	65	70	57	55	58	50	....
Maryville §§	Maximum	82	82	86	84	87	82	91	84	79	89	84	90	90	79	66	79	87	82	81	63	67	71	74	72	71	81	74	75	75	66	....
	Minimum	44	50	52	57	57	61	62	65	55	56	61	61	69	69	50	53	53	58	54	57	38	38	43	57	57	62	55	53	52	50	....
Oregon	Maximum	74	78	81	79	80	75	83	78	73	85	82	86	86	80	65	76	80	78	78	75	62	65	71	70	69	81	73	68	61	66	....
	Minimum	51	53	60	64	59	63	64	65	65	68	64	67	70	62	51	60	61	59	56	53	39	45	56	57	62	67	54	53	53	51	....
St. Joseph	Maximum	80	82	86	85	87	79	89	81	79	89	87	91	90	81	69	78	84	81	83	73	66	70	73	73	75	86	78	66	60	68	....
	Minimum	54	56	59	58	58	65	66	68	64	69	67	74	74	63	56	65	65	62	58	48	44	48	58	59	65	64	57	55	55	52	....
Trenton	Maximum	73	77	81	79	81	80	81	83	84	85	84	86	86	84	74	78	80	78	79	76	61	64	74	75	75	80	78	67	69	66	....
	Minimum	50	55	57	57	60	63	63	65	63	69	70	71	70	72	58	65	65	62	67	61	41	45	53	59	63	67	58	54	52	50	....

---

¹, ², ³, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning: the maximum temperature then read is charged the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
0
0.5
1
2
4
6
8
A

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

LIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

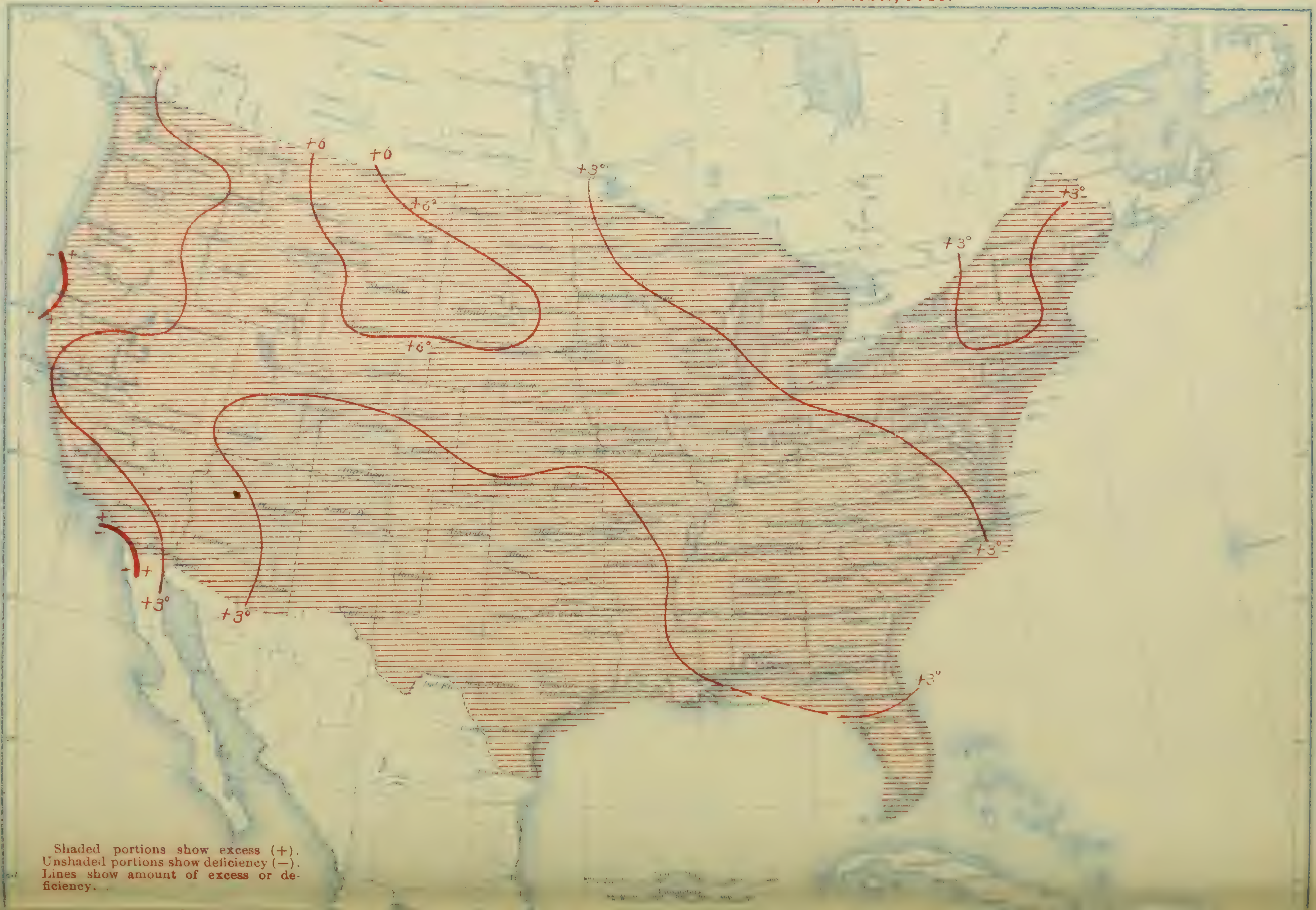
OCTOBER, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

NOV 20 1915

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
NOVEMBER 19, 1915

Departure of the Mean Temperature from the Normal, October, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

OL. XIX. COLUMBIA, MO., OCTOBER, 1915. No. 10

GENERAL SUMMARY.

October, 1915, was characterized by bright skies, moderate nd uniform temperatures, and light precipitation. The eather was quite ideal for the farm, as well as most other out-oor occupations. A moderate but general freeze, on the 9th, amaged some late corn. Wheat seeding was pushed with igor, and at the close of the month many fields were showing reen. In a few of the eastern counties there was some little mplaint of dryness.

Except the first nine days, and perhaps the 13th and 14th, mperatures were persistently above normal. The daily ex-s was markedly uniform in all sections, although it was a ttle greater in the northwest plateau than in other divisions, hich is contrary to the usual. The 9th was the only cold ay of the month, although some few stations reported killing st on the 5th, and below 32° on the 10th. Several stations ported 90° or higher, on one or more days. During the past 7 years only four Octobers have been warmer than the present onth, and during the same period four have given about the me temperature values.

The month was exceptionally dry. Only five Octobers in rty-eight years have been dryer. On the 4th and again about e middle of the month showers occurred, but after the 18th ere was no precipitation. Although 59 per cent of the sta-ns received less than one inch, there was ample moisture in e soil for needs, being largely the result of course of the avy summer and early autumn rains. It is also of interest remark that it is the first month in 1915 since April with ficient precipitation.

PRESSURE.

Except for a few passing depressions during the first week d again about the middle of the month, attended by the ual unsettled conditions, the prevailing atmospheric pressure s slightly above normal, and fine weather was the rule. The ost marked high pressure wave of the month, which also was e only one bearing an advance message of winter, passed on e 8th and 9th.

TEMPERATURE.

The monthly mean temperature, 66 stations reporting, was .8 degrees. The mean departure from the normal for 52 tions having 10 or more years' record was plus 2.6 degrees. e mean for the northeast plain was 58.9 degrees, or 2.3 de-es above normal; southeast lowlands, 62.2 degrees, or 3.3 grees above normal; Ozark plateau, 60.1 degrees, or 2.0 ove normal; southwest plain, 60.1 degrees, or 2.4 above nor-al. and northwest plateau, 59.1 degrees, or 3.4 above rmal. Temperatures of 32 degrees or lower occurred at prac-ally all stations, save the larger cities, on the 9th. Three tions reported temperatures of 90 degrees or higher.

HUMIDITY.

The atmosphere was less humid than during any month since pril. The monthly mean relative humidity was about 14 per nt below the normal.

PRECIPITATION.

The average precipitation, 78 stations reporting, was 1.19 ches. The departure from the normal for 66 stations having or more years' record was minus 1.51 inches. The monthly erages and departures for the five divisions of the State were follows: northeast plain, 0.96 inch, deficiency 1.39 inches; southeast lowands, 1.50 inches, deficiency, 1.36 inches; Ozark plateau, 1.71 inches, deficiency 1.11 inches; southwest plain, 1.14 inches, deficiency 1.28 inches, and northwest plateau, 0.56 inch, deficiency 2.18 inches. The greatest local monthly precipitation was 3.05 inches, at Hollister, and the least was 0.10 inch, at Liberty. The greatest amount recorded in any 24 consecutive hours was 1.97 inches, at Goodland on the 13th.

The average number of days with 0.01 inch or more precipitation was 3.

WIND.

The prevailing winds were from the south. The total number of miles and the hourly velocities differed but little from their respective normals for the State as a whole; quite strong winds, however, prevailed for a time on several dates, particularly on the 7th, 16th, 21st, and 31st.

SUNSHINE AND CLOUDINESS.

It was an unusually bright month. The percentage of possible sunshine for the State, based upon the records of Kansas City, Columbia and St. Louis, was about 11 above normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—2d, 9th, 13th, 14th, 16th, 18th and 19th.
Frost, light—5th, 6th; Heavy, 5th, 6th, 8th and 9th; Killing—8th and 9th.
Halos, solar—11th, 25th and 30th. Lunar, 17th, 19th, 23d, 24th, 27th and 30th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	30.07	81	......	257	74	5,286	7.1	28	sw	31
Hannibal	30.07	79	......	....	....	6,262	8.4	33	sw	31
Kansas City	30.05	68	46	288	83	8,492	11.4	34	nw	7
St. Joseph	30.04	81	52	279	81	*5,793	8.2	29	nw	7
St. Louis	30.08	71	52	297	86	9,500	12.8	43	s	31
Springfield	30.10	74	54	289	83	7,001	9.4	38	se	16
Cairo, Ill	30.09	......	......	....	....	5,219	7.0	27	nw	8
Keokuk, Iowa	30.06	79	60	249	72	5,374	7.2	30	sw	3

* For 27 days, 14 hours.

COMPARATIVE DATA FOR OCTOBER.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	53.6	−3.5	89	24	2.65	+0.21	......	....	7	...	....	....
1889	53.8	−3.3	91	27	2.50	+0.06	......	...	6	...	....	....
1890	54.8	−2.3	91	22	2.24	−0.20	......	....	6	...	....	....
1891	55.7	−1.4	98	19	1.11	−1.33	......	....	3	...	....	....
1892	57.5	+0.6	95	16	2.28	−0.16	2.40	0	5	16	7	8
1893	56.7	−0.4	95	16	0.99	−1.45	2.81	....	10	20	8	3
1894	57.6	+0.5	94	18	1.74	−0.70	3.52	T.	6	17	8	6
1895	51.2	−5.9	89	15	0.35	−2.09	1.20	T.	2	21	6	4
1896	54.1	−3.0	90	19	2.48	+0.04	2.68	0	5	19	6	6
1897	62.5	+5.4	99	23	0.71	−1.73	1.70	0	3	22	6	3
1898	53.5	−3.6	94	19	4.23	+1.79	4.51	1.4	8	11	7	13
1899	62.4	+5.3	100	24	2.93	+0.49	2.53	0	5	20	6	5
1900	62.4	+5.3	92	25	4.18	+1.74	4.04	0	7	17	7	7
1901	60.1	+3.0	96	24	1.64	−0.80	2.98	0	6	18	8	5
1902	59.5	+2.4	88	23	2.52	+0.08	2.69	0	5	21	5	5
1903	57.2	+0.1	90	19	2.85	+0.41	3.80	0	6	19	6	6
1904	57.6	+0.5	90	19	0.90	−1.54	2.46	0	3	20	7	4
1905	55.1	−2.0	90	20	4.64	+2.20	7.24	0.3	5	17	6	8
1906	56.3	−0.8	94	17	0.87	−1.57	1.55	0	10	15	7	9
1907	56.7	−0.4	94	18	2.90	+0.46	3.46	0	7	19	5	7
1908	56.3	−0.8	92	21	2.74	+0.30	4.90	0.8	5	18	6	7
1909	57.2	+0.1	96	20	2.77	+0.33	2.57	T.	6	19	5	7
1910	59.4	+2.3	94	15	2.71	+0.27	5.50	0	5	22	4	5
1911	56.9	−0.2	96	25	3.30	+0.86	5.12	0.2	8	11	7	13
1912	59.1	+2.0	97	21	3.83	+1.39	5.12	0.7	......	20	5	6
1913	54.7	−2.5	93	11	4.46	+1.94	2.80	3.3	9	15	6	10
1914	59.2	+2.0	88	19	4.54	+2.04	5.40	0	7	14	6	11
1915	59.8	+2.6	95	22	1.19	−1.45	1.97	0	3	23	5	3

Climatological data for October, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	1.33	-1.44	0.89	0	3	21	1	6	se	C. Randecker.
Brunswick	Chariton	652	36	59.0	+2.5	86	3	29	9	45	0.71	-2.15	0.33	0	5	23	3	5	s	Louis Benecke.
Columbia	Boone	784	26	58.8	+4.0	85	3	29	9	39	1.37	-1.05	0.63	0	5	20	6	5	s	U. S. Weather Bureau.
Fayette	Howard	725	31	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	21	58.8	+1.1	85	3	27	9	45	1.28	-1.18	0.49	0	5	25	4	2	nw	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	1.93	0.35	1.83	0	3	16	10	5	sw	J. W. Putnam
Hannibal	Marion	534	23	57.8	+1.9	84	3	29	9	39	0.58	-1.06	0.39	0	4	22	6	3	sw	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	0.57	-2.11	0.31	0	4	21	3	7	sw	C. T. [illegible].
Jefferson City	Cole	628	30	58.9	+2.2	84	3	29	9	37	1.57	-0.72	0.65	0	4	26	0	5	w	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	0.62	.....	0.31	0	3	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	58.3	+2.5	85	31	24	9	43	1.62	0.65	0.78	0	3	25	3	3	sw	C. T. Farris.
Macon	Macon	881	18	57.4	-0.7	85	3	27	9	48	1.20	-1.85	0.83	0	3	24^c	1^c	5^c	sw	John A. Cook.
Mexico	Audrain	797	38	57.3	+0.7	85	3	28	9	46	0.87	-1.35	0.39	0	5	23	2	6	sw	J. T. Llewellyn.
Oakfield‡‡	Franklin	793	24	61.2	+2.4	84	3†	29	9	36	0.97	-1.63	0.43	0	3	21	9	1	s	L. L. Stevens.
Palmyra	Marion	652	4	55.2	.....	83	3	26	9	19	0.38	-1.60	0.28	0	3	20	7	4	sw	W. B. Marshall.
St. Catherine	Linn	914	3	57.6	.....	83	3	26	9	37	0.67	.....	0.55	0	4	19	12	0	w	L. D. Baker.
St. Charles	St. Charles	614	38	60.6	+2.9	84	31	29	9	40	0.67	1.75	0.35	0	2	26	3	2	s	L. C. Sanger.
St. Louis (1)	St. Louis City	717	45	61.7	+3.3	82	3	37	9	26	0.90	-1.51	0.40	0	4	22	6	3	s	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	6.06	.....	83	31	33	9	29	0.83	.....	0.34	0	5	22	5	4	nw	St. Louis University.
Steffenville	Lewis	576	23	60.0	+2.9	88	3	26	9	45	0.75	-1.35	0.75	0	1	23	5	3	sw	Frank Hall.
Unionville	Putnam	1,072	23	58.2	+3.1	85	3	24	9	42	0.66	-1.54	0.66	0	1	20	7	4	s	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	0.88	.....	0.32	0	3	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	59.1	+3.5	83	3	31	9	42	0.80	-1.75	0.53	0	4	20	6	5	nw	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	.....	D. L. Albert
Cardwell	Dunklin	225	5	63.4	.....	95	28	29	9	55	2.30	.....	1.80	0	4	25	3	3	s	E. M. Perry.
Caruthersville	Pemiscott	220	25	65.0	+4.4	85	3	36	9	37	1.61	-1.00	0.83	0	3	24	4	3	e	H. E. Averill.
Doniphan	Ripley	440	11	59.3	+1.6	81	3†	29	9	40	1.61	-1.38	1.10	0	4	25	1	5	nw	W. W. Martin.
Jackson	Cape Girardeau	458	25	62.4	+5.3	85	20	28	9	41	1.02	-1.93	0.77	0	3	20	5	6	s	L. M. Bean
Marble Hill	Bollinger	420	24	62.0	+4.5	84	28	29	9	43	1.11	-1.28	0.98	0	3	23	5	3	s	Dr. A. L. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	1.47	-1.87	0.79	0	5	19	2	10	s	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	1.35	.....	1.10	0	2	25	0	6	s	George F. Ellis
Poplar Bluff	Butler	333	12	61.2	+1.2	85	21	31	9†	43	2.14	-0.69	0.90	0	5	21	0	10	.....	Albert E. Cox
Sikeston	Scott	328	15	61.4	+2.0	84	3	32	9	33	1.14	-1.32	0.75	0	3	25	5	1	sw	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	63.2	+4.1	83	3	36	9	28	1.20	-1.43	0.85	0	3	20	6	5	s	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	0.73	-1.49	0.45	0	4	25	0	6	s	G. V. Randolph.
Bagnell	Miller	504	....	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	.....	Mrs. Nellie V. Houser
Birchtree	Shannon	1,200	22	58.4^c	+0.4	81	3	28	9	36	1.27	-1.28	0.87	0	2	27	2	2	s	V. H. Kirkendall.
Bolivar	Polk	1,020	28	59.8	+1.3	84	3	29	9	39	2.26	-0.47	0.89	0	4	26	5	0	s	A. C. Fink.
Cassville	Barry	1,500	5	58.0	.....	85	25	25	9	48	1.11	.....	0.90	0	2	29	2	0	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	61.9	.....	83	3	28	9	46	1.30	.....	0.93	0	2	28	2	1	n	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	62.0	+1.8	85	3†	28	9	46	1.97	-1.05	0.97	0	5	25	1	5	sw	H. E. Dean.
Eldon	Miller	934	15	59.2	.....	83	3†	28	9	38	1.85	-0.91	0.60	0	6	26	5	0	s	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	62.2	.....	84	28†	28	9	55	1.43	.....	1.02	0	3	27	4	0	s	R. C. Walton.
Gano ‡‡	Dent	1,250	12	60.2	+2.3	84	28	27	9	43	1.37	-2.37	0.73	0	3	25	5	1	s	A. C. Leach.
Goodland	Iron	1,000	11	....	.....	....	....	24	9	....	1.97	-1.85	1.97	0	1	22	7	2	s	F. M. Adams.
Hollister	Taney	1,000	7	61.6	.....	88	3+	30	9	50	3.05	-0.06	1.10	0	4	28	0	3	sw	W. P. Chapmann
Houston	Texas	1,280	23	58.6	+1.6	84	29	27	9	40	1.01	-1.46	0.45	0	3	25	2	3	nw	R. F. Harmon.
Ironton	Iron	925	38	58.0	+2.1	83	28	23	9	47	1.20	-1.47	0.80	0	3	18	4	9	n	W. H. Delano.
Koshkonong	Oregon	911	15	62.3	+2.7	84	28	38	6	33	1.64	-1.07	0.78	0	4	22	4	5	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	61.1	+2.6	90	22†	27	9	54	2.60	-0.03	0.91	0	4	22	6	3	w	O. L. Weissgerber.
Lockwood	Dade	1,088	21	60.4	+2.4	88	3	31	9	35	1.75	-1.28	0.72	0	4	23	6	2	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	58.6	+1.1	81	28†	27	9	37	1.19	-1.69	0.48	0	4	26	0	5	s	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	59.4^c	+0.2	85	3	29	9	44	3.01	-0.31	1.22	0	4	28	2	1	sw	J. R. White & Son.
Neosho	Newton	1,083	33	60.4	+1.2	84	3	28	9	44	1.88	-1.30	0.82	0	4	25	1	2	sw	W. O. Buck.
Rolla	Phelps	1,139	34	59.4	+4.5	83	3	28	9	45	0.79	-1.65	0.28	0	4	25	6	0	s	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	60.4	+3.1	82	3	34	9	27	2.56	-0.24	0.75	0	6	25	5	1	s	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	.....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	61.6	.....	91	3	28	9	41	0.15	.....	0.15	0	1	24	4	3	sw	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	....	....	....	1.10	-1.15	0.70	0	....	....	....	....	.....	E. F. Hirni
Clinton	Henry	800	29	60.7	+2.3	89	3	28	9	44	1.16	-1.21	0.56	0	3	23	8	0	nw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	58.2	+2.3	84	3	30	9	46	0.80	-1.78	0.40	0	3	19	5	7	sw	A. J. Sharp.
Lamar	Barton	964	55	61.0	+2.3	86	3	31	9	42	1.97	-1.04	0.91	0	5	27	2	2	s	E. H. Adams.
La Monte	Pettis	863	27	59.5	.....	82	2	25	9	44	1.07	-1.03	0.52	0	4	24	7	0	s	J. Ed. Hall.
Marshall	Saline	779	25	59.4	+2.5	85	3	26	9	38	0.11	-2.02	0.20	0	4	21	9	1	sw	Prof. W. H. Black.
Nevada	Vernon	860	22	59.6	.....	86	3	30	9	35	2.22	-0.39	0.85	0	5	26	4	1	sw	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	W. E. Mathews
Warrensburg	Johnson	883	37	61.0	+3.0	89	3	30	9	39	1.15	-1.40	0.65	0	3	24	5	2	sw	Geo. H. Collins.
Warsaw	Benton	883	11	60.2	+2.1	87	3	27	9	46	2.09	-1.53	0.60	0	6	19	11	1	sw	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	0.42	.....	0.33	0	2	21	6	4	sw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	63.0	+5.4	86	3	30	9	31	0.80	-2.79	0.80	0	2	29	0	2	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	57.5	+3.7	82	24	22	9	15	0.21	-2.22	0.15	0	3	20	10	1	nw	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	0.42	-3.81	0.30	0	2	20	0	11	......	Hocey O. Duby
Conception	Nodaway	982	31	57.4	+1.9	79	21	30	9	32	0.65	-1.94	0.51	0	3	17	11	3	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	58.2	+3.2	82	23	27	0	37	1.01	-1.78	0.86	0	2	26^a	2^a	2^a	nw	W. H. Campbell.
Kansas City	Jackson	963	27	62.0	+6.2	82	3	38	9	29	0.35	-1.86	0.25	0	4	23	6	2	s	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	59.9	3.8	81	3	33	5	33	0.20	-2.52	0.15	0	2	20	7	4	sw	J. F. Sharp.
Lexington	Lafayette	813	31	60.4	+2.8	86	3	29	9	35	0.69	-1.89	0.54	0	2	23	8	0	s	J. W. Keithley
Liberty	Clay	864	27	60.5^c	3.3	85	29	31	9	41	0.10	-2.09	0.10	0	1	25^c	2^c	1^c	sw	W. C. Wilmott.
Maryville	Nodaway	1,100	25	56.6	+3.1	81	24	26	9	37	0.97	-1.44	0.55	0	4	26	2	3	s	J. R. Brink.
Oregon	Holt	1,113	60	57.9	+3.0	78	24	30	9	30	0.93	-1.67	0.74	0	3	17	13	1	nw	Tom Curry.
St. Joseph	Buchanan	967	11	59.8	.....	81	24	29	9	35	0.33	-2.26	0.26	0	3	17	10	4	s	U. S. Weather Bureau.
Princeton	Mercer	1,150	1	58.2	.....	82	29	26	9	11	0.68	......	0.49	0	3	24	4	3	sw	John F. Frazier.
Trenton	Grundy	812	21	57.2	+1.2	81	3	28	9	30	0.51	-2.13	0.39	0	2	19	5	7	s	W. H. Estes.
Means and extremes				59.8	2.6	95	28	22	9	55	1.19	1.45	1.97	0	3	23	5	3	s	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in computing sectional or division means.

Small letters a, b, c, etc., appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 4; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for October, 1915.

Stations.	Watershed.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
theast Plain.																																	
lle	Missouri				.16									.89			.28																1.33
ck	Grand													.33	.03	.15	.15	.05															0.71
na***	Missouri			.19	.07								.63			T.	.19	.29															1.37
	do																																
	do				.43								.06	.49			.17	.13															1.28
	Mississippi												.01	1.83				.09															1.93
bal***	do			.01									.27	.12				.18															0.58
	Missouri				.12									.34			.04		.07														0.57
on City	do				.65									.53			.36		.03														1.57
ville	Chariton				.01									.30			.31																0.62
na	Mississippi				.78									.32			T.	.52															1.62
	Chariton													.83			.02		.35														1.20
	Mississippi			T.	.30									.39			.07	.01	.10														0.87
d	Meramec				.26									.43				.28															0.97
ra	Mississippi													.28			.01		.09														0.38
erine	Grand												.08	.55	.01		.03	T.															0.67
ries	Missouri				T.									.35				.32															0.67
s (1)***	Mississippi				.19								.13	.18				.40															0.90
s (2)	do	.01			.22								.05	.21				.34															0.83
ville	do												T.	.75																			0.75
lle	Grand												T.	.66	T.			T.	T.														0.66
ia	Mississippi				.26			.30										.32															0.88
ton	do				.11									.33				.11	.25														0.80
ast Lowlands.																																	
rardeau	Mississippi																																
	do				.10									1.80				.12	.28														2.30
sville	do				T.	T.							T.	.83	.18				.60														1.61
an	Black				.08								T.	1.10			T.	.21	.21														1.60
	Mississippi				.10									.77				.15															1.02
Hill	do				.06									.98					.07														1.11
dred	do	.10				T.								.79	.15				.30	.13													1.47
near	do				.25										1.10																		1.35
Bluff	Black	.75				.15								.90					.14	.20													2.14
	Mississippi													.75	.25				.14														1.14
ill***	do				T.								T.	.79	.17		T.		.24	T.													1.20
Plateau.																																	
on	Gasconade													.45			.08	.15	.05														0.73
	Osage																																
	Black													.87				.40															1.27
r	Osage			.89									.33				.37	.67															2.26
e	White												.21			.90																	1.11
r	Gasconade				T.									.93				.37															1.30
	Neosho				.97								.31		.04		.45	.20															1.97
	Osage				.46								.60	.35			.32	.10	.02														1.85
ity	Black				.11								T.	1.02				.30															1.43
	Meramec				.24									.73				.40															1.37
nd	Black													1.97																			1.97
er	White				.35								1.10				.60	1.00															3.05
	Gasconade				.45								.20				T.	.36															1.01
	Mississippi	T.				.15								.80				T.	.25														1.20
long	Black				.15									.36			.35	.78															1.64
n	Osage				.74									.91			.60	.35															2.60
od	do				.72								.12				.54	.37															1.75
an Grove	White				.30	.23								.48			T.	.18															1.19
Vernon	Neosho				1.22								.33				.68	.78															3.01
	do				.82								.43				.35	.28															1.88
	Meramec				.24	.12								.28			T.	T.	.15														0.79
chi***	White			.07	.52								.73			.03	.72	.49															2.56
and	Osage																																
west Plain.																																	
t	Osage																	.15															0.15
	do												.30				.56	.30															1.16
nville	do													.35			.40		.05														0.80
	Neosho				.91									.33			.42	.08	.23														1.97
ge	Missouri												.25	.05			.52	.20															1.07
all	do				T.								.20	.10			.10	.01															0.41
	Osage				.37								.30	.04			.66	.85															2.22
	do																																
nsburg	Missouri												.65	T.			.47	.03															1.15
	Osage				.60								.30	.08			.58	.46	.07														2.09
ly	Missouri												T.	.09			.33																0.42
west Plateau.																																	
	Grand												.25	.55																			0.80
y	do	T.											T.	.15			.02	.04															0.21
	do													.30			.12																0.42
tion	Missouri												.51				10	.04															0.65
ty	Grand											.86							.15														1.01
s City***	Missouri												.25			.05	.01	.04															0.35
	Grand														.15				.05														0.20
on	Missouri													.54			.15																0.69
	do												T.					.10															0.10
lle	do												.55	.21			.14	.07															0.97
	do												.74			.08	.11																0.93
ph***	Missouri												.26	T.		.01	T.	.06															0.33
	do												.49				.16	.03															0.68
	Grand												T.	.39		.12	T.	T.															0.51

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station: precipitation is for 24 hour period, midnight to midnight.

Precipitation in the next following measurement.

Separate dates of fall not recorded.

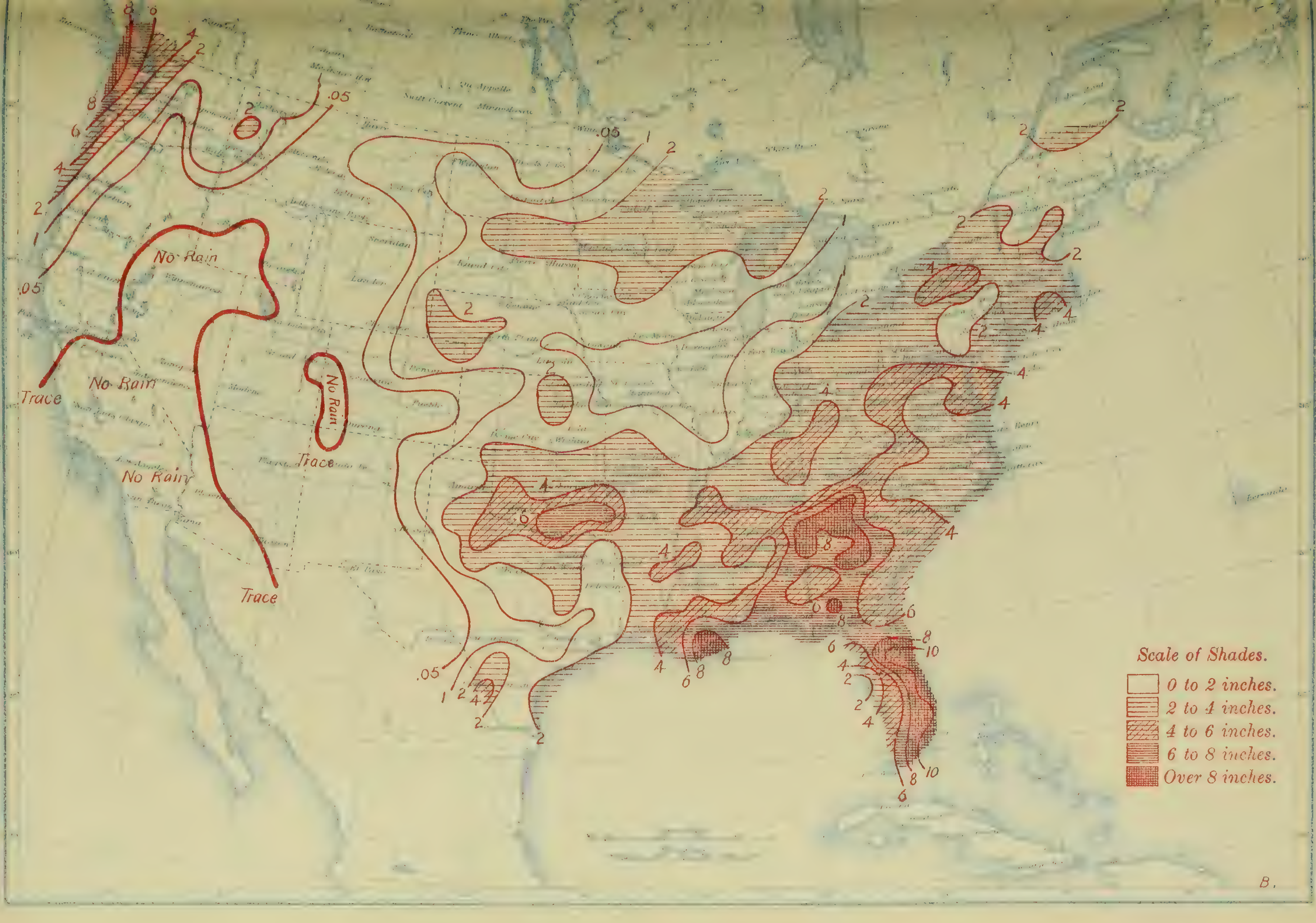
Daily temperatures for October, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	75	81	86	59	62	70	58	55	61	61	78	77	64	77	77	76	73	77	77	77	78	82	81	80	70	77	79	85	81	82	[illegible]
	Minimum ...	49	51	48	51	36	39	40	38	29	40	46	55	53	44	45	45	57	49	45	45	38	38	41	44	48	42	40	40	41	41	[illegible]
Columbia	Maximum...	71	77	85	62	57	68	55	52	59	77	74	76	59	70	72	73	74	74	74	67	72	74	78	80	66	71	73	77	77	80	[illegible]
	Minimum ...	48	45	58	45	38	38	40	34	29	19	55	55	47	43	50	55	59	52	46	43	37	41	47	51	46	45	40	49	41	46	[illegible]
Fayette	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum ...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum...	70	76	84	64	56	65	51	46	58	76	71	77	61	71	68	69	71	74	74	67	74	73	78	79	68	68	78	79	70	76	[illegible]
	Minimum ...	48	45	56	45	37	36	41	32	29	48	55	52	52	43	46	53	59	51	46	40	37	41	42	45	48	42	39	49	41	45	[illegible]
Jefferson City §§	Maximum...	72	78	84	63	58	67	58	53	61	76	74	76	67	71	74	72	75	77	76	68	....	73	78	80	65	75	80	77	78	80	[illegible]
	Minimum ...	48	45	48	55	39	35	37	38	29	36	54	56	53	42	45	53	60	53	47	50	41	42	42	46	52	41	43	46	45	45	47
Macon §§	Maximum...	71	76	85	56	58	68	55	51	59	77	75	77	57	74	74	70	72	73	74	68	74	77	79	79	65	70	78	80	78	80	[illegible]
	Minimum ...	41	47	49	49	34	35	39	36	27	29	52	50	52	41	40	45	54	49	46	47	40	41	45	48	48	42	42	42	42	44	[illegible]
Mexico §§	Maximum...	72	80	85	63	60	68	58	53	60	77	75	79	60	73	74	70	75	76	77	68	72	74	80	80	71	75	80	76	79	79	[illegible]
	Minimum ...	45	42	48	54	36	35	38	38	28	31	50	42	43	40	40	41	55	49	44	44	36	36	39	41	49	45	38	42	39	39	[illegible]
Oakfield	Maximum...	75	79	84	72	61	68	60	53	61	77	71	78	72	70	76	71	72	75	78	73	72	75	79	82	74	77	82	83	81	79	84
	Minimum ...	47	47	55	52	37	35	43	36	29	47	54	55	56	44	48	53	61	55	50	55	40	45	44	51	54	44	46	55	48	51	[illegible]
St. Catharine	Maximum...	69	74	83	72	58	66	58	50	57	74	74	72	66	71	70	69	72	72	71	64	69	73	74	75	70	69	75	76	76	76	77
	Minimum ...	49	46	56	48	33	37	36	34	26	45	56	51	52	40	47	52	57	49	43	49	37	43	44	40	45	40	42	47	39	49	[illegible]
St. Louis (1)	Maximum...	73	77	82	69	59	64	57	51	57	73	71	75	72	68	72	69	69	73	76	70	68	72	76	78	76	74	79	79	77	75	[illegible]
	Minimum ...	53	55	60	50	41	43	45	39	37	47	53	53	56	52	52	54	63	60	56	53	47	53	55	55	57	51	53	59	55	55	[illegible]
Unionville §§	Maximum...	80	78	85	64	68	70	58	54	66	76	71	75	66	80	78	76	74	76	75	68	74	78	76	77	68	67	77	84	78	80	74
	Minimum ...	46	48	54	46	32	34	36	33	24	27	48	52	53	44	42	46	50	48	47	45	38	42	46	43	45	42	40	45	43	45	[illegible]
Warrenton §§	Maximum...	72	78	83	64	58	69	58	50	60	77	70	75	63	69	71	69	73	76	77	68	72	75	81	81	68	80	81	77	78	80	[illegible]
	Minimum ...	45	47	53	54	36	34	35	37	31	35	52	53	54	44	46	47	56	54	50	52	39	40	48	49	53	47	46	45	45	47	[illegible]
Southeast Lowlands.																																
Cardwell	Maximum...	38	83	85	81	68	70	68	64	64	72	74	78	70	78	82	82	83	85	84	85	80	75	78	80	83	78	82	95	82	81	[illegible]
	Minimum ...	54	52	55	60	43	37	42	31	29	42	43	45	62	56	54	62	65	70	55	59	48	46	40	40	38	47	42	40	50	45	42
Caruthersville	Maximum...	76	81	85	81	69	68	68	64	60	71	72	78	78	78	83	81	83	80	80	83	74	76	78	80	81	78	81	81	81	82	[illegible]
	Minimum ...	56	65	62	64	49	42	44	37	36	39	48	54	64	63	58	63	63	64	65	58	54	51	45	43	50	52	[illegible]	46	55	45	51
Doniphan	Maximum...	72	72	81	74	65	65	61	59	58	70	70	73	71	74	76	75	74	74	78	78	71	74	74	75	78	73	77	81	78	78	77
	Minimum ...	50	48	51	58	42	35	43	33	29	36	43	49	60	48	53	61	59	59	55	50	43	41	38	37	40	49	38	41	46	41	[illegible]
Jackson	Maximum...	75	79	80	77	65	69	68	67	60	71	74	80	72	74	80	77	75	75	77	85	80	76	81	80	80	84	83	82	80	80	[illegible]
	Minimum ...	55	49	57	60	41	36	45	35	28	40	48	51	62	63	52	58	60	62	66	53	45	45	40	40	45	45	41	41	48	45	[illegible]
Marble Hill	Maximum...	77	78	83	74	64	65	60	60	60	70	70	74	70	75	80	76	75	73	74	80	75	75	81	80	80	80	82	84	83	83	82
	Minimum ...	53	46	50	60	42	42	35	34	29	44	45	49	62	50	50	65	60	62	59	55	42	40	42	40	40	44	39	44	42	44	[illegible]
Poplar Bluff §§	Maximum...	60	77	78	84	70	66	69	67	62	72	80	80	75	76	77	81	70	75	73	81	85	75	77	79	80	81	82	81	84	82	82
	Minimum ...	50	50	53	53	42	37	37	35	31	31	52	50	52	53	53	56	60	62	59	51	47	46	42	39	41	40	39	39	42	45	45
Ozark Plateau.																																
Birchtree	Maximum...	75	77	81	74	61	68	....	51	59	69	69	69	73	75	77	73	68	....	65	68	....	65	67	68	65	70	67	70	70	79	75
	Minimum ...	55	54	53	54	36	32	....	33	28	41	43	49	52	47	55	60	62	....	50	50	....	42	42	45	41	41	40	54	48	59	55
Cassville	Maximum...	75	77	82	72	60	71	68	58	65	74	72	68	74	76	76	67	74	70	71	78	71	69	70	79	85	74	80	79	80	78	75
	Minimum ...	49	42	47	53	35	30	33	30	25	55	50	47	35	40	59	51	50	45	34	30	38	36	40	45	41	36	50	58	53	50	41
Eldon	Maximum...	72	71	83	76	58	67	68	54	62	70	73	75	68	71	75	79	74	77	76	67	70	80	73	79	68	74	76	78	79	80	[illegible]
	Minimum ...	55	45	54	46	36	33	39	38	28	45	51	53	51	41	43	54	59	51	46	50	36	45	45	45	49	39	46	50	42	42	[illegible]
Fruit City	Maximum...	77	78	80	71	63	67	64	59	60	71	70	72	72	75	76	72	69	78	79	77	72	76	80	80	79	80	81	84	84	80	[illegible]
	Minimum ...	58	55	57	55	42	32	43	38	28	42	46	48	57	50	57	60	65	54	55	52	44	49	50	48	52	51	51	50	52	54	52
Gano	Maximum...	73	81	83	72	58	69	62	59	64	73	72	76	71	71	80	80	72	79	80	72	72	75	80	81	72	76	82	84	82	82	[illegible]
	Minimum ...	44	44	53	42	37	31	40	34	27	45	48	53	52	51	45	57	63	48	51	42	41	46	37	47	51	40	43	52	47	45	57
Hollister	Maximum...	78	82	88	72	68	74	66	62	68	76	72	74	76	78	78	76	70	74	82	86	80	80	84	86	82	80	82	84	86	88	84
	Minimum ...	52	42	50	48	40	34	38	32	30	40	48	54	48	40	48	58	60	58	60	56	48	46	44	50	36	48	40	38	46	38	46
Ironton §§	Maximum...	75	76	81	71	61	67	60	56	60	70	69	75	74	73	78	76	72	75	81	76	72	74	78	80	76	76	80	83	81	78	78
	Minimum ...	49	41	46	61	35	29	40	29	23	39	45	49	59	45	41	55	59	61	48	45	38	36	32	34	45	34	33	42	40	36	42
Lebanon §§	Maximum...	81	80	85	70	65	70	65	64	65	75	74	75	75	82	82	80	76	81	80	76	80	90	90	81	74	76	81	84	85	81	[illegible]
	Minimum ...	48	47	52	51	36	35	37	35	27	34	45	42	51	43	44	51	61	55	48	50	46	40	36	50	49	39	40	51	46	45	50
Mountain Grove §§	Maximum...	76	76	80	58	59	58	56	57	60	67	72	71	71	72	75	76	72	75	78	73	74	76	78	76	71	76	77	81	81	80	80
	Minimum ...	46	46	52	54	38	33	41	34	27	33	47	48	51	41	51	53	60	57	53	53	37	39	40	47	44	39	42	50	44	48	49
Neosho	Maximum...	73	78	84	83	64	71	69	59	66	74	72	75	72	78	81	79	74	77	78	70	72	77	79	80	75	76	79	81	83	83	81
	Minimum ...	50	45	56	54	37	34	41	33	28	49	55	52	45	40	44	62	59	56	50	52	37	37	38	42	46	33	35	51	40	39	59
Rolla §§	Maximum...	72	78	83	64	63	69	57	54	62	74	71	74	70	74	78	80	75	78	78	70	75	77	82	82	82	75	81	80	80	80	[illegible]
	Minimum ...	45	46	49	54	38	32	34	33	28	29	51	51	53	43	44	49	58	55	51	50	41	41	42	42	51	43	43	46	46	46	47
Springfield	Maximum...	71	74	82	67	56	66	56	52	59	72	70	68	68	73	73	71	68	73	74	67	70	74	77	77	67	72	76	77	78	77	79
	Minimum. ..	49	51	58	46	39	39	42	38	34	45	50	54	47	48	56	62	61	59	54	52	47	53	54	52	52	45	51	56	56	53	59
Southwest Plain.																																
Amoret	Maximum...	73	79	91	78	66	74	64	57	64	77	77	78	79	76	78	79	77	78	78	81	76	78	77	82	81	80	80	79	81	80	82
	Minimum ...	49	47	58	49	36	38	38	34	28	48	46	50	61	43	46	49	59	65	52	46	40	49	50	41	44	49	41	53	43	45	41
Clinton	Maximum...	76	79	89	81	65	73	61	59	63	78	78	78	73	79	84	86	72	80	79	71	77	80	81	81	75	77	78	81	82	83	82
	Minimum ...	50	44	45	52	36	35	39	35	28	42	57	53	52	43	47	50	60	51	45	46	40	40	40	46	40	41	40	40	44	44	57
Harrisonville §§	Maximum...	71	79	84	59	61	71	58	53	55	76	74	72	67	73	73	77	73	73	75	65	72	73	77	78	66	73	76	75	78	81	78
	Minimum ...	51	49	52	48	37	37	40	37	30	30	58	57	52	43	44	49	59	51	45	45	40	40	43	44	49	41	44	45	45	44	[illegible]
Lamar §§	Maximum...	75	80	86	85	64	72	61	58	64	75	72	75	73	78	78	81	68	79	80	71	75	79	80	86	70	75	80	82	82	83	82
	Minimum ...	50	49	58	54	38	38	41	36	31	42	58	57	46	44	49	55	63	58	48	47	41	40	43	48	50	37	38	47	44	44	47
Lamonte	Maximum...	77	82	79	71	64	74	58	56	61	77	78	77	61	76	75	80	74	76	73	71	78	80	78	75	68	74	72	75	80	76	81
	Minimum ...	57	61	58	48	34	36	40	34	25	45	56	53	52	38	47	52	49	45	52	48	43	36	42	39	45	43	46	51	38	47	52
Marshall	Maximum...	72	78	85	79	60	70	64	54	60	77	78	78	68	75	73	73	77	75	76	68	73	78	79	78	68	73	77	77	78	80	80
	Minimum ...	53	44	55	48	35	34	38	35	26	42	62	49	50	40	45	53	58	47	45	50	38	43	43	44	48	39	39	52	42	44	58
Warrensburg	Maximum...	74	82	89	61	63	73	60	56	60	80	80	68	70	79	77	84	71	78	86	68	78	80	84	83	69	71	81	78	83	85	82
	Minimum ...	49	49	58	50	36	39	38	37	30	45	56	53	51	45	47	56	60	52	50	47	42	45	47	50	50	45	46	52	46	46	45
Warsaw	Maximum...	80	80	87	80	63	71	64	55	64	77	76	78	70	77	78	80	75	77	78	68	75	78	81	82	74	75	80	78	80	84	87
	Minimum ...	45	40	55	56	39	32	38	34	27	49	56	53	52	39	45	59	55	54	44	56	36	37	38	40	48	35	34	46	38	39	59
Northwest Plateau.																																
Avalon	Maximum...	74	77	86	76	62	70	60	51	60	77	75	75	68	77	72	73	75	74	78	67	76	80	80	79	75	74	76	80	81	80	78
	Minimum ...	57	50	57	48	35	40	45	37	30	50	58	60	56	43	45	56	62	55	50	49	51	61	65	64	68	48	50	60	58	49	60
Grant City	Maximum...	73	78	79	64	63	65	55	58	60	78	72	64	75	74	67	67	68	70	75	67	76	78	82	80	71	68	79	73	80	78	74
	Minimum ...	48	47	57	45	34	39	36	36	27	44	46	44	54	48	47	52	58	51	45	45	39	44	46	45	44	43	51	44	43	44	52
Kansas City	Maximum...	72	78	82	60	62	68	56	53	58	76	71	70	69	74	72	76	72	74	77	67	75	76	79	80	65	71	77	77	80	81	76
	Minimum ...	51	57	60	47	40	46	41	40	38	50	60	54	51	55	53	57	60	56	55	52	51	55	57	56	53	48	52	54	51	56	59
Kidder §§	Maximum...	69	76	81	69	59	66	55	50	58	77	71	72	71	70	73	71	72	71	77	68	78	76	79	78	64	77	76	80	78	78	74
	Minimum ...	51	49	58	46	33	39	37	35	34	39	58	57	58	56	54	59	62	50	48	47	46	49	48	54	44	44	44	48	45	50	59
Lexington §§	Maximum...	72	77	86	60	62	70	68	54	59	77	75	76	67	76	74	75	76	75	78	68	75	77	80	80	69	72	78	79	79	81	79
	Minimum ...	53	47	59	49	37	41	39	37	29	45	57	56	52	42	47	56	60	48	46	50	40	42	46	52	50	44	41	54	44	48	58
Maryville §§	Maximum...	71	78	77	66	63	64	53	53	57	77	70	60	69	75	66	70	70	70	75	66	74	77	78	81	65	70	79	76	80	80	73
	Minimum ...	50	49	49	44	32	32	35	32	26	28	45	53	57	42	44	47	53	49	44	44	40	41	43	45	43	42	42	42	43	47	46
Oregon	Maximum...	67	75	76	63	59	64	55	50	54	74	71	67	65	70	67	72	70	68	72	68	70	73	76	78	70	65	76	72	76	77	71
	Minimum ...	52	49	60	43	33	43	36	34	30	46	57	54	50	46	51	53	58	48	47	45	44	49	50	52	42	41	46	48	46	51	57
St. Joseph	Maximum...	71	78	78	59	64	65	55	52	58	77	73	63	68	76	71	78	66	70	76	66	74	77	80	81	64	70	78	77	80	80	73
	Minimum ...	54	54	58	44	37	46	39	35	29	48	59	55	52	47	52	56	56	52	49	48	43	46	50	56	49	48	47	52	45	50	53
Tarkio	Maximum...	66	70	81	79	56	54	56	51	55	72	64	70	65	67	68	67	70	72	68	62	67	69	73	73	69	66	73	73	74	73	73
	Minimum ...	53	55	57	47	34	39	38	36	28	46	55	55	53	41	47	....	54	51	55	47	41	44	50	51	48	45	43	45	46	48	56

[illegible] indicate respectively 1, 2, 3, etc., days missing from the record.

[illegible] almost always occurs.

§§ Instruments are read in the morning: the maximum temperature then read is charg


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
Trace
Trace
Trace
.05
1
2
4
6
8
10
B.

Slach

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

NOVEMBER, 1915

BY

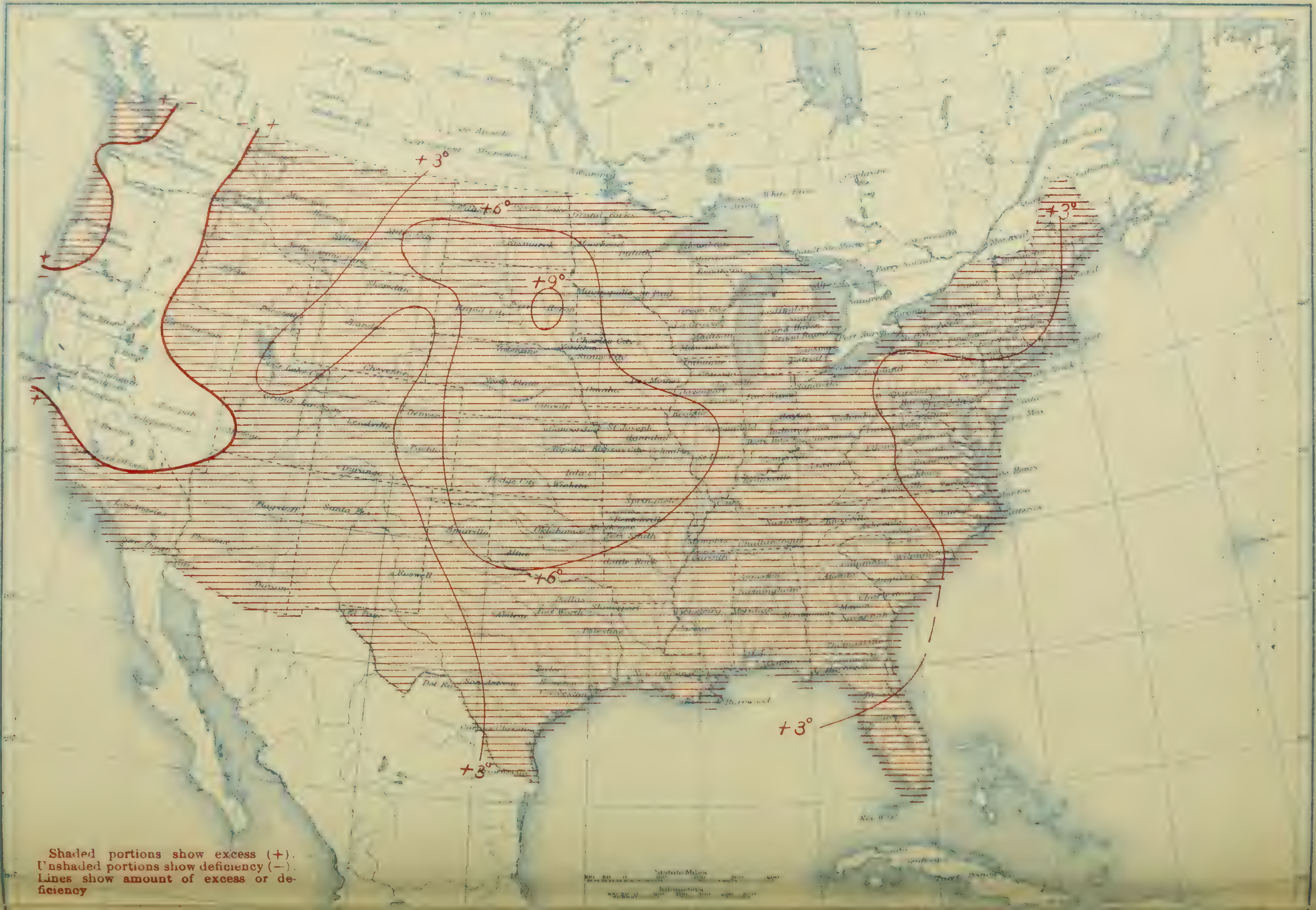
GEORGE REEDER

SECTION DIRECTOR

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
DECEMBER 22, 1915

Departure of the Mean Temperature from the Normal, November, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

XIX. COLUMBIA, MO., NOVEMBER, 1915. No. 11

GENERAL SUMMARY.

lthough November, 1915, was perhaps the windiest on re- , it was very mild, sunshiny, and highly favorable for au- n work. Considering the State as a whole and the present th with October, it may be safely said that rarely have the ther conditions for two entire autumn months been so gen- y favorable for farming, and other outdoor pursuits.

s compared with previous years, extending back to 1888, three Novembers have been warmer than the present th. It also is true, however, that several stations having records experienced higher temperatures this month than before in November. The present month opened warm, warm conditions prevailed during most of the first ten ; the lowest temperatures occurred near the middle of the th as a rule, and the period of cold was short. The warm- November since the beginning of authentic records was that 09, with a mean temperature of 53.6 degrees, or 4.1 de- higher than the present month. During the same length ime the maximum temperature, 87 degrees, has been led three times and exceeded five times; the lowest min- m was 8 below zero, in 1898, as compared with 12 above of the present month. Out of 27 Novembers 6 have exper- ed zero temperatures.

e precipitation of the month fell at regular intervals, and quite uniformly distributed. The days of the heaviest and t general precipitation were the 10th, 11th, 18th, 19th, and and 26th. The moisture was sufficient for all present ls; it was somewhat less than normal in the southeast low- and northwest plateau, and exceeded the normals in the r three divisions, being greater in the plains than the Ozark . The snowfall of the month was unimportant, being very t and melted as fast as it fell.

TEMPERATURE.

he monthly mean temperature, 66 stations reporting, was degrees. The mean departure from the normal for 52 sta- having 10 or more years' record was plus 4.9 degrees. means and departures for the five divisions were as follows: heast plain, 48.0 degrees, plus 5.0 degrees; southeast low- ls, 53.4 degrees, plus 5.7 degrees; Ozark plateau, 51.0 de- , plus 4.4 degrees; southwest plain 49.4 degrees, plus 4.6 ees, and northwest plateau, 47.1 degrees, plus 5.1 degrees. number of days temperature was 32 degrees or lower was in the northeast plain, 7 southeast lowlands, 9 Ozark au, 10 southwest plain, and 12 in the northwest plateau. temperatures were 85 degrees or higher at most stations on ral days, but they did not reach 90 degrees.

HUMIDITY.

he prevailing relative humidity for the State as a whole red but little from the normal.

PRECIPITATION.

he average precipitation, 76 stations reporting, was 2.76 es. The departure from the normal for 65 stations having r more years' record was plus 0.33 inch. The monthly ages and departures for the five divisions were as follows: heast plain, 3.08 inches, or .86 inch above normal; southeast ands, 3.61 inches, or .09 inch below normal; Ozark plateau, 3.15 inches, or .42 inch above normal; southwest plain, 2.65 inches, or .79 inch above normal, and northwest plateau, 1.21 inches, or .57 inch below normal. The greatest local monthly precipitation was 5.25 inches, at Koshkonong, and the least was 0.82 inch, at St. Joseph. The greatest amount recorded in any 24 consecutive hours was 2.62 inches, at Gorin on the 25th and 26th.

The average number of days with 0.01 inch or more precipitation was 5, which is a little less than normal. Snows were light and unimportant.

WIND.

The prevailing winds were from the south. There was more wind than is usually experienced during Novembers; the average hourly velocity exceeded the normal by nearly 3 miles. Strong winds obtained on the 11th and 19th.

SUNSHINE AND CLOUDINESS.

Cloudy and clear periods alternated quite regularly. The total number of hours of sunshine was slightly above normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—25th. Halos, lunar—2d, 13th, 16th, 17th, 18th, 22d and 24th. Halos, solar—2d, 4th, 13th, 17th, 24th and 30th.

Sleet—13th and 30th. Thunderstorms—8th, 10th, 11th and 25th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.		Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.98	72	......	171	57	7,528	10.5	36	nw	19
Hannibal	29.98	75	......	....	....	8,016	11.1	38	nw	19
Kansas City	29.98	66	50	208	69	10,558	14.7	49	nw	19
St. Joseph	29.98	72	54	173	58	7,687	10.7	39	nw	19
St. Louis	30.00	68	55	211	70	11,811	16.4	54	s	11
Springfield	30.02	72	55	242	79	9,675	13.4	42	nw	19
Cairo, Ill	30.04	74	58	....	....	7,732	10.7	38	se	25
Keokuk, Iowa	29.98	77	63	155	50	6,979	9.7	36	w	19

COMPARATIVE DATA FOR NOVEMBER.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	41.6	−2.0	87	15	3.26	+0.94	......	....	11	....	....	....
1889	39.9	−3.7	73	8	3.43	+1.11	......	....	7	....	....	....
1890	46.5	+2.9	80	20	2.31	−0.01	......	....	5	....	....	....
1891	39.6	−4.0	82	−2	3.60	+1.28	......	....	5	....	....	....
1892	40.1	−3.5	79	9	2.60	+0.28	......	1.0	6	11	7	12
1893	40.9	−2.7	79	−1	1.59	−0.73	4.86	0.3	4	14	9	7
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	−1.3	82	5	2.18	−0.14	4.00	0.2	6	11	7	12
1897	43.4	−0.2	82	−3	2.40	+0.08	2.39	T.	6	13	8	9
1898	39.9	3.7	79	−8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+0.1	84	7	2.58	+0.26	4.55	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+6.5	85	18	3.52	+1.20	2.14	0.4	9	8	9	13
1903	40.9	−2.7	79	2	1.24	−1.08	2.44	1.1	5	13	8	9
1904	46.3	+2.7	83	11	0.22	−2.10	0.68	T.	2	21	5	4
1905	45.8	+2.2	83	2	1.94	−0.38	2.49	T.	6	18	6	6
1906	42.5	−1.1	88	−3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+4.0	87	9	4.14	+1.82	4.00	0.2	8	15	7	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	−4.5	93	−3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	48.6	+4.0	89	2	0.65	−1.84	1.90	0.1	3	19	6	5
1915	49.5	+4.9	87	12	2.76	+0.33	2.62	0.1	5	16	7	7

Climatological data for November, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	3.70	+1.27	1.24	0	6	17	3	10	se	C. Randecker.
Brunswick	Chariton	652	36	47.2	+5.5	85	6	17	15	45	2.29	−0.26	1.05	0	6	17	1	12	w	Louis Benecke.
Columbia	Boone	784	26	48.9	+6.5	84	6	18	15	34	3.02	−0.71	1.66	T.	7	11	9	10	s	U. S. Weather Bureau.
Fayette	Howard	725	31	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	48.6	+3.4	84	5†	16	15	40	3.19	+0.91	2.02	T.	5	15	11	4	sw	L. A. Higley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	3.54	+1.54	2.62	T.	5	11	7	12	nw	J. W. Pulliam.
Hannibal	Marion	534	23	47.0	+6.5	82	7	17	15	35	3.11	+1.16	2.18	T.	7	13	8	9	sw	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	..	....	....	....	....	3.29	+0.46	2.30	0	7	16	4	10	sw	C. T. Maushund.
Jefferson City	Cole	628	30	49.0	+4.9	87	6	19	15	36	3.29	+1.01	1.95	0	6	20	3	7	w	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	3.27	......	1.82	T.	....	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	49.6	+5.9	87	8	16	15	54	3.85	+1.61	2.35	0.2	6	20	4	6	s	J. T. Farrell.
Macon	Macon	881	18	45.4	+0.9	82	6	16	15†	41	4.21	+2.44	2.42	T.	6	15	5	10	sw	John A. Cook.
Mexico	Audrain	797	38	47.3	+4.5	84	7	17	15†	45	3.42	+0.98	1.56	1.2	9	14	6	10	sw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	51.6	+6.0	84	6	18	15	40	4.65	+1.92	2.23	T.	6	7	16	7	nw	E. E. Steines.
Palmyra	Marion	652	4	44.1	.....	82	6	17	15†	42	2.79	+0.46	1.26	T.	6	13	12	5	sw	W. B. Markell.
St. Catherine	Linn	914	3	46.3	.....	79	6	14	15	35	1.70	......	0.52	T.	7	15	11	4	nw	L. D. Baker.
St. Charles	St. Charles	614	38	51.1	+6.4	85	6	16	15	38	2.96	+0.11	1.05	T.	7	12	8	10	nw	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	50.9	+7.5	81	6	23	15	34	1.97	−0.91	0.85	T.	6	11	10	9	s	U. S. Weather Bureau.
St. Louis (2)	......do.	578	4	50.0	.....	81	6	21	15	34	2.51	......	1.16	0.2	6	14	9	7	se	St. Louis University.
Steffenville	Lewis	576	23	47.0	+3.4	85	6	15	15†	31	3.60	+1.75	1.35	T.	5	10	12	8	w	Frank Hall.
Unionville	Putnam	1,072	23	43.3	+3.6	80	6	14	15	38	1.47	−0.35	0.65	1.0	3	13	8	9	s	Geo. W. Davis.
Vandalia++	Audrain	796	5	....	.....	....	....	....	....	....	3.18	......	2.40	T.	3	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	47.9	+5.0	83	6	16	15	40	2.78	+0.09	1.79	T.	7	12	6	12	s	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	....	D. L. Albert
Cardwell	Dunklin	225	5	56.9^{j}	.....	85	7	27	16	44	4.09	......	1.32	0	8	....	....	....	....	E. M. Perry.
Caruthersville	Pemiscott	220	25	54.2	+4.8	83	1†	25	30	34	4.32	−0.13	1.32	0	6	22	3	5	e	H. E. Averill.
Doniphan	Ripley	440	11	51.3	+3.6	82	1†	19	30	38	3.86	+0.96	1.85	0	5	21	3	6	sw	W. W. Martin
Jackson	Cape Girardeau	458	25	54.6	+8.7	85	5	21	30	41	2.76	−0.73	1.13	0	5	8	13	9	s	L. M. Bean
Marble Hill	Bollinger	420	24	52.4	+6.9	85	5†	20	22†	40	3.02	−0.19	1.05	0	6	19	9	2	s	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	4.31	+0.12	1.25	0	9	12	4	14	se	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	3.12	......	1.70	0	5	20	0	10	n	George F. Ellis
Poplar Bluff	Butler	333	12	52.4	+5.4	84	6†	20	30	39	4.00	+0.52	1.67	T.	7	21	1	8	.....	Albert E. Cox
Sikeston	Scott	328	15	52.8	+4.8	86	10	25	15	35	2.43	−1.41	1.10	0	5	18	6	6	s	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	52.4	+5.5	81	1	26	15	28	4.18	+0.16	1.36	0	7	13	9	8	s	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.26	−1.47	0.78	0	4	20	2	8	s	G. V. Randolph.
Bagnell	Miller	534	....	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	Mrs. Nellie V. Houser
Birchtree	Shannon	1,200	22	51.2^{a}	+5.0	78	7	17	30	42	4.20	+1.37	2.05	0	5	22	3	5	s	V. H. Kirkendall.
Bolivar	Polk	1,020	28	50.8	+3.9	83	6	19	15	35	2.92	+0.18	1.75	T.	3	16	12	2	s	A. C. Fink.
Cassville	Barry	1,500	5	51.0	.....	85	1	15	30	45	2.73	......	1.22	T.	4	23	4	3	s	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	51.0	.....	85	3	14	15	31	3.68	......	1.09	0	5	25	1	4	s	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	52.8	+3.1	83	1†	17	15†	44	2.74	−0.10	1.52	0.2	4	20	3	7	w	H. E. Dean.
Eldon	Miller	934	15	49.2	.....	84	7	17	15	35	3.04	+0.74	1.15	T.	6	17	8	5	nw	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	50.6	.....	84	1	23	15	36	3.68	......	1.70	0	4	16	10	4	s	R. C. Walton.
Gano ‡‡	Dent	1,250	12	51.5	+4.2	86	6	17	15	39	3.09	+0.89	2.02	0	4	17	8	5	s	A. C. Leach.
Goodland	Iron	1,000	11	47.8^{j}	+2.1	72	6†	15	30	33	4.29	+2.00	1.95	0	3	18	3	9	n	F. M. Adams.
Hollister	Taney	1,000	7	53.3	.....	86	6†	18	30	44	1.85	−1.53	0.70	0	4	23	0	7	nw	W. P. Chapmann
Houston	Texas	1,280	23	51.9	+6.0	83	6	19	15†	38	3.59	+1.05	1.00	T.	4	20	5	5	nw	R. F. Harmon.
Ironton	Iron	925	38	50.0	+6.6	82	5	17	30	42	3.65	−0.32	1.85	T.	5	15	6	9	s	W. H. Delano.
Koshkonong	Oregon	911	15	53.3	+3.7	86	6	23	30	35	5.25	+2.26	2.06	0	6	18	5	7	sw	R. M. Hitt.
Lebanon	Laclede	1,265	27	51.0^{b}	+5.0	86	6	17	15	45	2.47	−0.07	1.10	0	5	18	6	6	w	O. L. Weissgerber.
Lockwood	Dade	1,088	21	50.7^{b}	+2.1	83	6	21	15†	38	2.66	+0.62	1.98	T.	4	23	5	2	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	49.5	+2.4	85	7	19	30	40	4.36	+2.24	2.45	0	6	14	9	7	s	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	J. R. White & Son.
Neosho	Newton	1,083	33	52.6	+5.7	84	6	18	30	42	2.15	−0.88	0.80	0.5	5	26	2	2	sw	W. O. Buck.
Rolla	Phelps	1,139	34	49.4	+5.2	85	6	18	15†	47	2.70	+0.16	1.81	0	4	17	11	2	s	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	50.7	+6.3	80	6	24	30	30	2.66	+0.02	1.70	1.2	6	23	5	2	s	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	51.3	.....	87	7	19	15†	42	1.54	......	0.80	T.	4	19	5	6	sw	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	20	14	46	2.95	+0.61	1.95	0	3	13^{h}	0^{h}	9^{h}	.....	E. F. Hirni
Clinton	Henry	800	29	51.8	+4.4	85	6	18	15	42	3.15	+1.22	1.40	0	4	15	10	5	nw	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	49.6	+7.6	82	6	16	16	42	3.00	+1.03	2.05	0	4	13	1	16	sw	A. J. Sharp.
Lamar	Barton	964	35	51.1	+4.8	84	6	21	15	45	2.68	+0.54	1.92	0	5	17	5	8	s	E. H. Adams.
Lamonte	Pettis	863	27	47.4	.....	85	7	13	15	47	2.95	+1.01	1.75	0	4	9	17	4	nw	J. Ed. Hall.
Marshall	Saline	779	25	43.8^{a}	+1.1	83	6	15	15	34	2.80	+0.72	1.07	T.	5	17^{b}	6^{b}	5^{b}	nw	Prof. W. H. Black.
Nevada	Vernon	860	22	48.1	.....	84	6	20	15	34	2.09	+0.16	1.25	0	4	23	3	4	sw	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	W. E. Mathews
Warrensburg	Johnson	883	37	50.0	+5.4	86	6	19	15	36	2.15	+0.40	1.22	T.	6	15	10	5	sw	Geo. H. Collins.
Warsaw	Benton	883	11	51.6	+4.1	86	6	16	15	40	3.86	+1.44	1.28	T.	4	17	12	1	sw	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	..	....	....	....	....	1.97	......	1.20	T.	5	11	10	9	sw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	50.0	+6.1	81	6†	20	15	31	1.75	−0.38	0.70	0	3	19	8	3	sw	F. G. Ashbaugh.
Bethany	Harrison	881	26	44.7	+1.3	82	6	12	15	41	0.98	−0.61	0.60	0	3	15	9	6	nw	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	1.15	−1.29	0.52	0	4	11	3	16	.....	Hocey O. Dupy
Conception	Nodaway	982	31	46.2	+5.3	79	6	18	15	32	0.87	−0.40	0.46	0	5	6	16	8	nw	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	45.1	+2.4	80	7	17	15†	34	1.16	−0.25	0.37	0	5	19	3	8	nw	W. H. Campbell.
Kansas City	Jackson	963	27	50.0	+8.5	83	6	27	14	30	0.87	−0.98	0.49	T.	5	17	6	7	s	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	47.4	+6.0	81	6	20	15	34	1.10	−0.61	0.40	1.0	5	16	9	5	sw	J. F. Sharp.
Lexington	Lafayette	813	34	49.3	+5.8	83	6	22	30	35	1.24	−0.69	0.47	0	3	20	0	10	s	J. W. Keithley.
Liberty	Clay	864	27	49.6	+6.7	86	6	19	15	37	1.10	−0.62	0.55	T.	3	17	12	1	sw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	43.8	+4.6	80	6†	17	15	43	1.08	−0.34	0.61	0	4	19	3	8	n	J. R. Brink.
Oregon	Holt	1,113	60	46.4	+5.5	79	7	19	30	30	1.16	−0.47	0.52	T.	4	12	10	8	nw	Tom Curry.
St. Joseph	Buchanan	967	44	47.7	.....	82	6	23	15	29	0.82	−1.01	0.37	T.	7	11	12	7	nw	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	45.6	.....	78	6	19	30	36	1.75	......	0.97	0.5	7	18	5	7	nw	John F. Frazier.
Trenton	Grundy	812	21	46.6	+4.2	77	7	19	15	29	1.91	+0.28	0.82	T.	3	10	12	8	s	W. H. Estes.
State means and extremes				49.5	+4.9	87	6†	12	15	54	2.76	+0.33	2.62	0.1	5	16	7	7	s	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, etc., appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ++Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for November, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ortheast Plain.																																	
ville	Missouri										.10	.17							.34	1.34	T.						1.10	.65					3.70
wick	Grand								T.		.03	.05							.25	.88	T.						1.05	T.	.03				2.29
bia***	Missouri							T.		T.	.04	.25							1.02	T.	.03					1.32	.34		.02				3.02
te	do																																
n	do										.02	.20							.92			.03					2.02		T.				3.19
	Mississippi										.09								.58							1.40	1.22		.25	T.			3.54
ibal***	do										.05	.17							.59	.02	T.		T.			1.43	.75		.10	T.			3.11
ann	Missouri											.24							.03	.53	T.	.05					2.30	.12		.02			3.29
son City	do											.16							.35	.65		.03					1.95	.15					3.29
sville	Chariton							T.			.06	.09							1.30									1.82					3.27
ana	Mississippi												.32	T.	T.				.21	.41		T.				.30	2.35		.26				3.85
n	Chariton								T.		.05	.03							.07	1.02							2.42	.62					4.21
ro	Mississippi										.02	.24							.09	.85	T.	T.				.01	1.56	.55	.02	.08			3.42
eld	Meramec											.70							.71	.17						.83	2.23		.01				4.65
ra.	Mississippi										.06	.04								.66						T.	1.26	.70	.07				2.79
erine	Grand										.05	T.	T.		.06				.52	.27						.46	.28	T.	.06				1.70
arles	Missouri											.57							.35	.50						.20	1.05	.19	.10				2.96
uis (1)***	Mississippi											.43							.61	.03	T.					.54	.31		.05	T.			1.97
uis (2)	do											.60							.61	.10	T.					.79	.37		.04				2.51
aville	do										.10	T.							.40	.50			T.			1.15	1.35	T.	.10				3.60
ville	Grand								T.		T.	T.								.65				T.			.52		.30				1.47
nia	Mississippi																																
aton	do											.23								.58	.03	.03					1.79	.07	.05				2.78
heast Lowlands.																																	
Girardeau	Mississippi																																
ell	do								.35			.30	.22		1.32	.10					.40	.60					.80						4.09
ersville	do								.58	T.		.52	.12		1.32				.75							T.	1.03						4.32
an	Black									T.	T.	.91			.77				.28							.05	1.85						3.86
n	Mississippi								.11			1.13			.35				.47							.70							2.76
e Hill	do								.35			1.05			.26	.21			.25								.90						3.02
Madrid	do								.20	.30			.80		.43	.33			.55	.40							1.25			.05			4.31
n (near)	do					.10						1.70							.30							.10	.92						3.12
r Bluff	Black									.34			.80		.81				.15	.20							1.67	.03					4.00
on	Mississippi											.70							.60	.02						1.10	.01						2.43
Ill.***	do								.21			.53		.02	.94				1.12	T.						.57	.79		T.				4.18
k Plateau.																																	
gton	Gasconade											.22							.15	.11							.78						1.26
ell	Osage																																
tree	Black											1.58			.10				.35							.12	2.05						4.20
ar	Osage										.42								.75								1.75						2.92
ille	White											1.22							.17							.37	.97						2.73
er	Gasconade											.68							.97	.13						1.09	.81						3.68
	Neosho											.72							.13							1.52	.37						2.74
	Osage									.07		.31							.86	.16						1.15	.49						3.04
City	Black								.08			1.40							.50								1.70						3.68
	Meramec									T.		.89								.18						.14	1.88						3.09
and	Black											1.95							.59								1.75						4.29
ter	White									.10									.45							.60	.70						1.85
on	Gasconade											1.00							.79							.84	.96						3.59
on	Mississippi								.15			T.	1.25		T.				.15	.25	T.						1.85						3.65
onong	Black									.13		1.96			.42				.38							.30	2.06						5.25
on	Osage											.50							.32	.40							1.10	.15					2.47
wood	do											.22							.46							.97	1.01						2.66
tain Grove	White										.09		1.02						.56	.12							2.45	.12					4.36
t Vernon	Neosho																																
no	do								.11			.80							.14							.55	.55						2.15
	Meramec											.64								.16							1.81	.09					2.70
gfield***	White								.02	T.		.45						.05	.43							1.36	.35						2.66
tland	Osage																																
thwest Plain.																																	
et	Osage										T.	.19			T.			T.	.52							.80	.03						1.54
ton City	do										.20								.80							1.95							2.95
on	do											.25							1.15						1.40	.35							3.15
sonville	do										T.	.10							.62	.23							2.05						3.00
r	Neosho											.26							.29	.09							1.92	.12					2.68
nte	Missouri							T.			T.									1.75	.10					.50	.60						2.95
all	do									T.	.01	.01							1.07							.92	.79		T.				2.80
da	Osage											.35							.49							.50	.75						2.09
ia	do																																
ensburg	Missouri							T.		T.	.02	.15							1.22							.46	.29		.01				2.15
aw	Osage										T.	.35							1.05							1.28	1.18		T.				3.86
erly	Missouri								T.		.01	.03							.36	.37							1.20			T.			1.97
thwest Plateau.																																	
on	Grand																		.70							.45			.60				1.75
any	do							T.			T.	T.							.60							.13		T.	.25				0.98
othe	do																		.10	.52							.40		.13				1.15
ption	Missouri							T.			.03	.15						T.	.46							T.		.05	.18		T.		0.87
t City	Grand										.09	.31			T.				.37	T.						.04			.35		T.		1.16
as City***	Missouri											.02						.16	.15							.49		.05					0.87
er	Grand										T.	.05			.05					.40					.20				.40				1.10
gton	Missouri																		.37	.40							.47		T.				1.24
ty	do																		.55							.40			.15				1.10
ville	do											.61				.05			.20										.22				1.08
on	do							T.				.35		.02					.27									.52					1.16
eph***	Missouri							T.		T.	.05	.04		.02				.14	.23				T.			.08		.26	T.		T.		0.82
o	do							.01			.39	.97		.07					.10									.11	.10				1.75
on	Grand							T.		T.		T.		T.				T.	.73							.82		.36					1.91

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

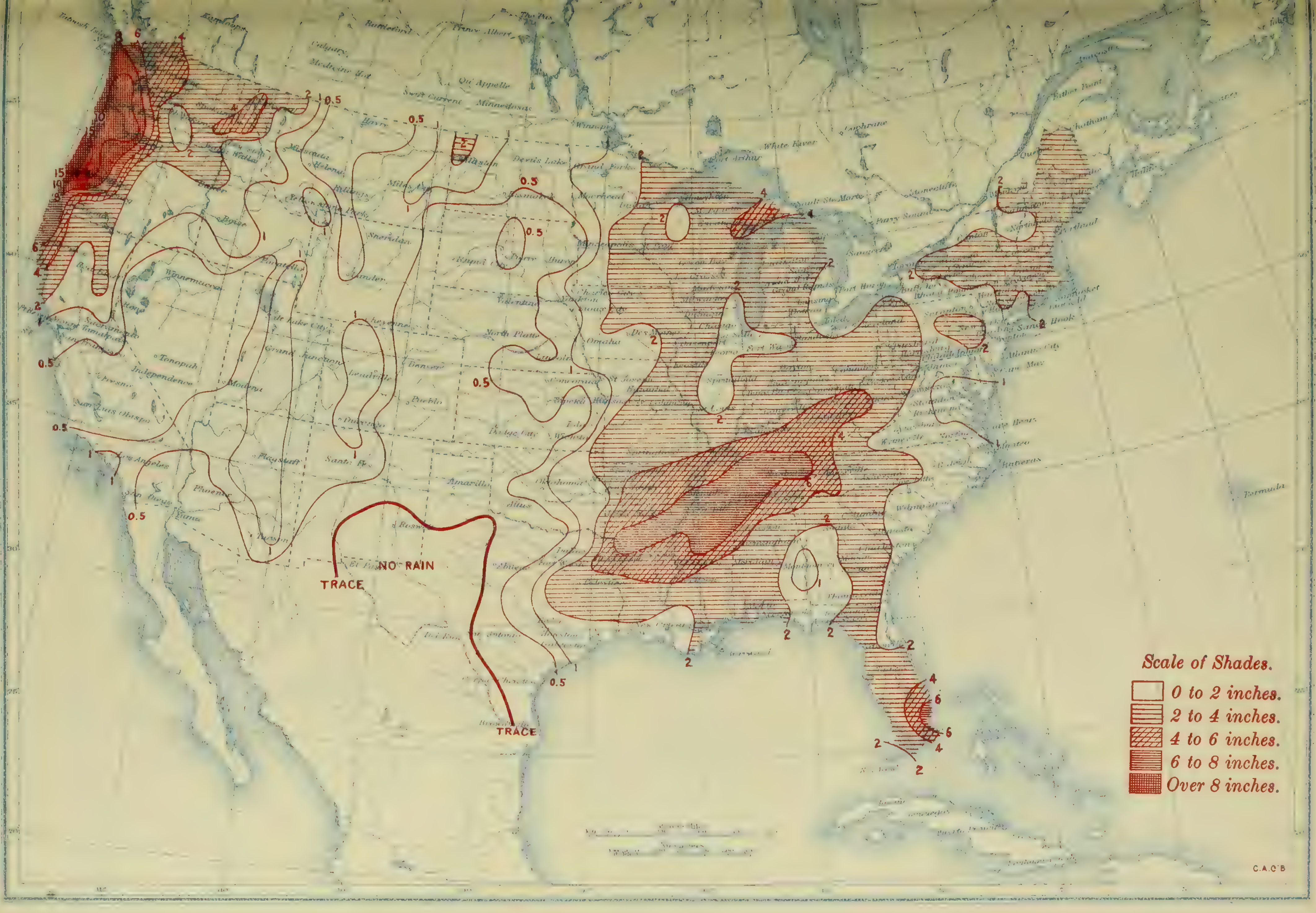
**Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for November, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	79	70	70	78	84	85	83	65	57	76	59	62	62	41	49	64	56	42	44	56	48	55	57	70	69	47	56	38	39	40	....
	Minimum...	40	39	37	39	48	48	57	49	34	34	53	51	30	29	17	19	32	32	33	30	29	23	33	33	43	36	29	35	27	21	....
Columbia	Maximum...	76	63	68	74	82	84	83	69	55	78	72	59	59	44	46	57	60	49	42	63	46	55	54	69	71	47	58	42	34	42	....
	Minimum...	43	42	38	52	53	60	63	43	37	51	38	33	31	25	18	35	37	33	36	35	28	26	36	44	47	35	32	31	27	23	....
Fayette	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum...	76	62	65	73	70	81	82	71	55	76	72	59	58	41	43	55	58	49	39	58	42	47	52	68	72	57	49	45	40	40	....
	Minimum...	41	38	33	53	49	53	66	45	37	50	39	32	30	24	17	35	31	33	33	31	26	22	36	35	54	35	29	30	22	21	....
Jefferson City §§	Maximum...	88	63	68	71	84	87	83	65	56	78	63	60	59	38	45	59	61	44	49	70	46	49	53	69	71	44	59	43	35	46	....
	Minimum...	46	46	36	38	55	51	62	59	38	39	55	32	29	32	19	23	34	35	33	33	33	25	36	39	59	46	31	28	27	23	....
Macon §§	Maximum...	75	64	66	73	77	82	84	61	55	74	60	59	60	37	45	57	57	42	40	51	45	55	54	69	68	39	48	36	31	39	....
	Minimum...	43	43	36	36	43	43	68	49	33	35	49	32	33	30	16	16	27	29	37	31	30	21	28	32	45	37	31	34	26	29	....
Mexico §§	Maximum...	78	63	68	75	80	83	84	63	56	78	64	60	59	40	45	59	60	72	41	62	46	52	54	68	73	41	56	38	35	40	....
	Minimum...	40	40	32	37	47	48	57	57	33	33	50	32	29	29	17	17	39	32	33	32	37	31	28	33	36	40	32	34	26	21	....
Oakfield	Maximum...	81	70	68	82	83	84	83	74	59	76	72	62	58	49	46	63	60	53	45	73	54	48	56	66	69	58	59	52	38	43	....
	Minimum...	51	45	39	54	53	62	61	59	38	52	51	33	36	33	18	33	35	41	33	33	33	31	37	37	57	37	33	34	26	23	....
St. Catharine	Maximum...	74	65	65	70	71	79	77	75	54	72	71	58	59	51	44	56	55	53	41	49	47	52	52	67	67	51	47	43	36	37	....
	Minimum...	39	40	37	49	47	53	61	54	43	46	45	29	30	28	14	31	29	36	32	28	28	19	30	39	46	35	28	31	24	18	....
St. Louis (3)	Maximum...	77	63	65	76	75	81	80	74	58	74	71	60	57	45	43	60	58	51	41	70	45	46	55	64	68	61	59	48	55	42	....
	Minimum...	58	51	47	56	53	61	64	49	42	53	45	39	42	27	23	35	39	34	34	36	34	31	41	37	57	43	37	35	27	25	....
Unionville §§	Maximum...	72	66	68	74	72	80	78	56	57	70	62	58	60	34	44	52	56	45	43	51	43	55	54	65	68	36	46	34	29	35	....
	Minimum...	40	39	35	40	43	41	48	45	28	32	42	29	31	26	14	17	24	28	32	27	25	17	25	32	45	34	22	30	23	16	....
Warrenton §§	Maximum...	78	63	69	77	81	83	81	67	55	75	65	58	58	38	43	57	45	40	44	67	45	48	52	67	71	56	59	41	52	42	....
	Minimum...	50	43	41	42	48	49	62	65	35	35	53	33	34	36	16	18	31	33	33	32	31	23	26	35	42	55	31	33	26	23	....
Southeast Lowlands.																																
Cardwell	Maximum...	78	80	72	76	84	84	85	80	80	81	82	83	80	74	66	60	....	....	....	....	....	....	....	....	....	69	60	60	54	....	....
	Minimum...	40	40	34	37	40	42	44	44	50	48	50	41	44	30	28	27	....	....	....	....	....	....	....	....	....	48	46	30	30	....	....
Caruthersville	Maximum...	83	73	70	78	83	82	81	75	70	80	74	67	56	52	49	58	63	55	54	70	69	51	62	68	73	68	60	54	48	48	....
	Minimum...	58	55	41	42	52	54	59	55	51	57	62	47	42	45	28	30	34	48	34	36	36	28	34	35	48	48	35	42	28	25	....
Doniphan	Maximum...	82	73	65	77	82	79	78	80	70	79	74	60	56	51	46	57	58	55	52	69	62	50	61	68	71	69	57	51	45	43	....
	Minimum...	53	45	33	39	47	51	53	63	48	42	52	38	32	38	24	29	28	43	40	31	39	22	28	27	58	43	30	42	25	19	....
Jackson	Maximum...	84	78	73	75	85	83	81	84	80	77	78	65	60	51	51	57	62	79	71	68	64	56	60	65	73	70	62	55	50	49	....
	Minimum...	51	50	52	45	52	53	60	62	40	51	59	40	33	35	23	30	35	46	39	34	28	27	35	30	55	47	37	45	27	21	....
Marble Hill	Maximum...	84	83	69	80	85	82	85	80	72	80	73	67	60	54	50	60	60	55	48	62	62	50	62	60	72	60	62	56	46	40	....
	Minimum...	54	45	29	47	47	50	52	60	47	51	61	48	32	34	23	31	26	45	40	35	38	20	30	35	40	47	35	33	26	20	....
Poplar Bluff §§	Maximum...	80	83	72	75	71	84	83	81	84	76	78	71	64	57	52	50	58	63	50	51	68	55	52	64	69	77	58	60	54	47	....
	Minimum...	54	45	36	36	50	51	50	57	47	39	42	40	33	37	23	26	28	43	40	35	35	23	29	28	56	55	32	38	26	20	....
Ozark Plateau.																																
Birchtree	Maximum...	73	72	65	75	75	75	68	71	70	76	74	61	....	49	47	60	57	52	48	73	65	50	60	67	68	65	58	48	40	44	....
	Minimum...	55	50	37	45	51	55	56	60	44	50	52	42	....	33	21	30	33	40	38	31	36	23	35	35	57	37	29	37	24	17	....
Cassville	Maximum...	85	71	74	80	80	79	79	79	68	71	71	61	72	54	55	52	53	61	61	53	67	68	65	69	69	71	53	43	56	45	....
	Minimum...	44	37	32	41	50	52	64	55	47	53	49	26	44	16	34	30	29	27	26	24	25	25	20	50	44	55	25	22	31	15	....
Eldon	Maximum...	79	64	70	80	82	83	84	74	55	78	62	62	58	45	47	62	60	46	45	72	47	55	58	69	42	66	60	48	44	46	....
	Minimum...	45	41	35	35	47	53	60	45	36	50	41	32	29	30	17	32	30	34	32	32	31	23	35	36	55	36	30	52	26	19	....
Fruit City	Maximum...	84	75	71	74	76	81	78	71	61	76	71	61	54	48	56	61	53	50	46	71	55	50	59	65	67	52	58	50	40	45	....
	Minimum...	56	40	40	43	50	57	51	47	44	42	49	37	38	33	23	27	36	35	38	35	37	33	40	46	46	49	31	38	28	24	....
Gano	Maximum...	83	70	70	83	84	86	81	76	65	76	75	60	58	49	44	62	61	50	44	73	60	51	56	65	69	67	50	54	36	45	....
	Minimum...	55	46	35	51	58	58	60	60	40	51	57	33	33	32	17	33	34	40	34	34	31	20	36	41	52	36	31	34	25	20	....
Hollister	Maximum...	84	84	76	78	84	86	84	86	66	82	78	66	58	44	52	66	64	62	56	66	74	69	66	68	60	48	64	56	54	56	....
	Minimum...	44	48	32	41	46	50	48	46	48	56	52	32	32	38	22	26	32	44	40	42	32	30	40	44	48	42	28	38	28	18	....
Ironton §§	Maximum...	81	68	66	80	82	82	81	80	61	75	71	61	57	51	46	63	59	48	43	71	53	52	59	67	68	61	58	51	40	47	....
	Minimum...	52	42	25	45	44	47	47	60	42	45	67	32	28	41	21	24	28	36	37	34	35	18	32	25	42	54	30	40	25	17	....
Lebanon §§	Maximum...	85	71	69	81	82	86	82	75	62	74	65	65	56	42	50	63	58	55	50	65	55	55	63	....	....	....	....	60	42	52	....
	Minimum...	54	40	40	43	51	60	60	59	41	40	50	30	32	34	17	33	37	35	35	35	30	28	32	32	46	44	31	32	26	21	....
Mountain Grove §§	Maximum...	82	70	68	79	80	84	85	76	57	70	65	65	56	42	54	63	41	57	47	49	54	58	62	68	65	48	56	42	41	45	....
	Minimum...	52	45	44	47	51	55	56	60	44	44	48	32	35	40	20	23	33	36	37	27	24	27	35	37	38	38	30	34	25	19	....
Neosho	Maximum...	81	76	74	81	82	84	79	72	70	77	75	62	61	53	53	63	57	53	51	72	68	57	64	70	70	58	64	61	47	53	....
	Minimum...	48	39	38	51	58	55	63	60	48	53	54	29	30	33	19	32	37	40	40	30	27	23	27	35	57	32	31	33	24	18	....
Rolla §§	Maximum...	80	66	80	81	83	85	82	71	55	76	64	60	57	39	46	63	58	47	43	73	48	53	57	69	70	47	59	44	36	49	....
	Minimum...	54	47	33	35	55	59	60	62	40	41	53	34	30	38	18	18	36	37	34	34	32	22	22	32	48	40	32	33	25	20	....
Springfield	Maximum...	77	66	67	77	78	80	79	69	59	78	71	57	54	47	47	59	54	46	48	68	47	54	58	68	68	43	58	43	37	45	....
	Minimum...	58	50	47	52	59	59	60	51	47	56	41	38	41	27	24	36	39	39	38	38	35	31	37	45	43	32	35	30	27	24	....
Southwest Plain.																																
Amoret	Maximum...	81	82	82	81	82	86	87	81	58	78	79	62	62	55	55	64	58	58	52	70	58	59	61	73	72	54	66	50	42	44	....
	Minimum...	41	42	43	39	42	55	56	48	39	44	44	30	29	26	19	32	39	39	35	33	36	25	28	42	41	35	31	31	24	19	....
Clinton	Maximum...	80	67	79	79	83	85	82	75	65	80	74	62	59	47	60	63	57	56	49	68	50	56	68	71	73	65	60	61	38	50	....
	Minimum...	43	45	40	50	53	55	60	52	43	48	44	31	29	30	18	35	40	40	31	34	30	25	32	32	43	40	45	34	27	20	....
Harrisonville §§	Maximum...	77	64	70	76	79	82	80	60	57	75	55	59	58	38	60	57	57	43	48	67	47	56	57	69	67	50	53	42	36	41	....
	Minimum...	43	43	44	43	53	53	56	50	38	38	55	30	33	28	18	16	35	38	35	35	30	23	32	34	47	35	32	32	26	18	....
Lamar §§	Maximum...	82	72	74	82	84	81	78	67	65	78	64	63	64	41	53	63	58	47	53	69	53	57	63	70	76	51	47	43	42	52	....
	Minimum...	45	39	43	46	59	60	64	58	44	45	54	33	34	32	21	23	37	42	39	35	30	27	31	43	53	31	35	26	22	24	....
Lamonte	Maximum...	78	74	71	73	79	84	85	73	69	67	73	60	55	43	60	62	58	57	60	59	53	55	62	70	60	54	56	45	46	51	....
	Minimum...	37	35	34	39	46	51	45	39	33	39	36	27	25	25	13	23	33	29	35	29	26	22	29	30	38	33	29	21	22	25	....
Marshall	Maximum...	78	70	68	73	80	83	81	74	55	77	....	72	60	49	47	57	57	54	59	49	49	55	68	73	70	60	52	45	36	41	....
	Minimum...	48	42	34	50	49	57	61	50	34	52	....	41	29	28	15	29	31	38	24	....	27	22	40	45	58	35	29	27	25	19	....
Warrensburg	Maximum...	[illegible]	64	72	78	79	86	81	70	51	80	71	61	69	46	52	63	59	59	48	62	49	57	59	72	74	48	57	42	36	49	....
	Minimum...	44	43	38	55	50	54	56	50	35	47	42	34	32	29	19	35	35	38	36	36	30	27	34	41	45	36	31	31	26	22	....
Warsaw	Maximum...	80	70	71	82	85	86	83	75	60	79	75	62	63	52	50	63	60	55	50	72	62	58	59	70	72	58	63	57	58	50	....
	Minimum...	40	35	33	57	52	53	62	54	42	49	50	28	25	32	16	39	29	39	28	32	31	21	35	35	58	37	28	35	25	18	....
Northwest Plateau.																																
Avalon	Maximum...	76	67	68	75	77	81	81	73	56	74	71	60	60	58	47	61	56	53	42	53	47	55	55	58	50	49	49	47	37	37	....
	Minimum...	58	55	38	50	51	60	61	46	32	55	50	50	30	27	20	20	33	38	36	40	30	30	30	42	49	44	46	37	28	27	....
Grant City	Maximum...	73	65	68	69	71	78	80	70	59	70	70	62	58	53	46	49	51	50	40	54	44	55	51	53	65	48	45	43	35	35	....
	Minimum...	39	40	40	45	44	45	54	40	31	46	40	33	30	21	17	32	32	37	33	30	26	23	28	32	29	32	28	30	22	17	....
Kansas City	Maximum...	77	61	71	73	78	83	77	68	52	73	71	58	58	38	50	57	55	44	48	60	46	58	57	69	68	50	48	39	36	49	....
	Minimum...	51	48	46	56	53	61	64	42	37	51	45	39	38	27	28	35	42	39	37	41	32	34	36	47	38	35	34	32	28	28	....
Kidder §§	Maximum...	73	65	68	73	75	81	79	56	54	72	50	57	60	36	48	58	53	42	44	54	44	57	54	68	69	48	50	35	33	37	....
	Minimum...	52	41	42	42	45	55	62	44	31	38	48	36	35	24	20	31	34	41	35	43	32	32	32	48	58	35	35	34	21	23	....
Lexington §§	Maximum...	78	64	70	73	78	83	81	61	52	76	59	61	60	49	50	58	57	43	45	61	48	58	56	68	70	49	57	38	36	42	....
	Minimum...	43	43	40	52	49	59	62	48	35	49	58	33	33	28	29	35	35	40	35	36	30	27	35	42	59	37	31	26	27	22	....
Maryville §§	Maximum...	71	62	71	69	74	80	80	56	53	72	49	55	60	37	47	57	52	44	43	55	43	58	54	68	47	49	45	38	33	34	....
	Minimum...	42	38	37	42	44	45	50	41	29	29	44	31	31	20	17	21	31	35	31	31	25	24	30	30	45	30	29	30	21	18	....
Oregon	Maximum...	68	58	68	69	70	77	79	70	50	72	68	54	60	45	46	52	51	48	45	53	45	58	53	67	61	49	49	40	36	40	....
	Minimum...	42	40	43	50	45	52	62	42	32	47	38	32	37	22	20	30	37	35	32	38	26	28	30	44	37	30	33	30	31	19	....
St. Joseph	Maximum...	73	62	72	71	71	82	78	57	51	73	67	57	60	38	50	56	54	42	46	54	44	59	55	68	62	50	50	28	35	40	....
	Minimum...	45	41	41	55	48	56	62	40	35	50	40	37	31	24	23	33	38	38	35	37	30	30	31	48	37	34	33	31	26	24	....
Tarkio	Maximum...	70	67	65	68	70	74	77	71	55	71	69	55	56	51	45	50	53	52	41	52	46	54	53	64	66	45	48	46	31	38	....
	Minimum...	43	45	39	51	48	50	60	45	33	48	44	32	32	25	19	33	32	36	34	31	29	25	33	37	42	35	31	31	24	21	....

denote respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is char
days ... almost always ...


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
TRACE
TRACE
C.A.C'B

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

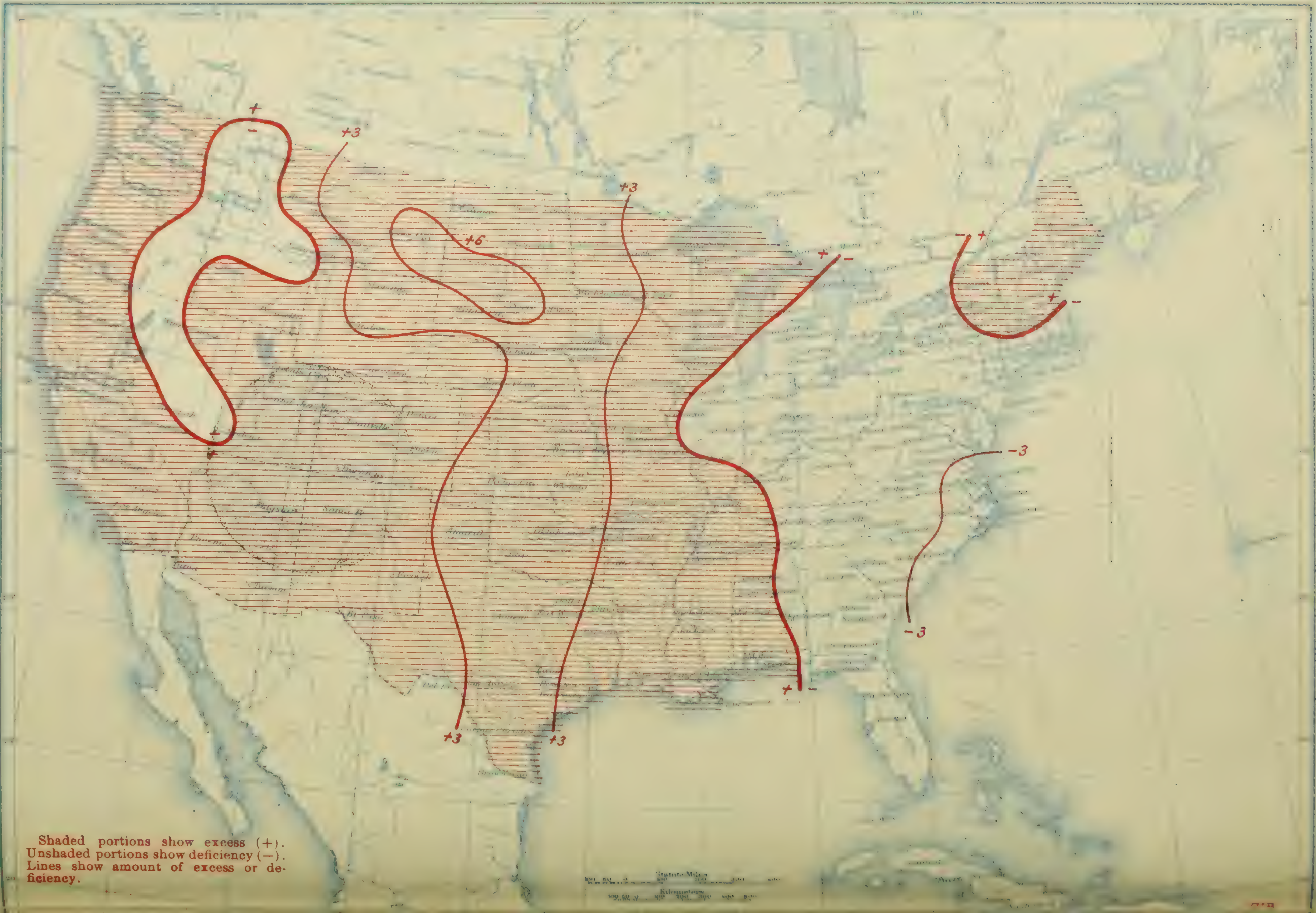
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

DECEMBER, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JANUARY 25, 1916

Departure of the Mean Temperature from the Normal, December, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

. XIX. COLUMBIA, MO., DECEMBER, 1915. No. 12

GENERAL SUMMARY.

Vhile the last five or six days of December, 1915, were more ess unsettled and cold, the first three weeks or more were d, as a rule, and generally favorable for building and other door occupations. The absence of general snow storms un- the 24th, permitted continued winter grazing.

he month opened slightly colder than normal, but by the temperatures had risen above normal, and they continued r or above normal, save for short intervals, up to the 23rd, r which date a cold snap prevailed until about the 29th. the 28th, the coldest day of the month, temperatures were r or below zero in all save the southern counties. There e a few local features worthy of note. For instance the an temperature of the northeast plain was practically nor- l, but at the same time maximum temperatures at several ions were the lowest for December ever recorded. The ther in the northwest plateau, thence southeastward to and luding the Ozark plateau and southeast lowlands averaged rly 2 degrees warmer than normal, while in the southwest in it was only a little more than 1 degree warmer, although ximum temperatures at several stations in this last named ision were higher than any previous similar values. And , there were no warm days, nor were there any very cold s, considering the day as twenty-four hours.

here was sufficient precipitation for present needs, except he southeast lowlands where there was somewhat more than essary. Precipitation was more or less general on the 10th l 11th, 15th and 16th, the 24th and the 31st.

he snowfall, most of it falling during one storm—the 24th vas the heaviest for December since records began in all di- ons, except the northwest plateau. From the northern e of the Ozark plateau northward across the Missouri River, total monthly falls were from about 10 to 18 inches.

Iild thunderstorms occurred on three days.

TEMPERATURE.

he mean monthly temperature for the State, as shown by records of 67 stations, was 34.7 degrees. The mean de- ture from the normal for 52 stations having 10 or more rs' record was plus 1.3 degrees, which is within the ordinary. mean for the northeast plain was about normal, and for other four divisions, i. e., southeast lowlands, Ozark pla- u, southwest plain and northwest plateau the means exceed- the normals by 1.8 degrees, 1.8 degrees, 1.2 degrees and 1.7 rees, respectively. The highest temperature, 84 degrees, ich occurred at Dean on the 3rd, has never been equaled ing the past 27 years. The minimum, 13° below zero, ugh, which occurred at La Monte on the 28th, has n equaled once and exceeded six times during the same nber of years, the lowest being 29° below zero, in 1901. inimum temperatures were 32 degrees or lower on an average 24 days, and 18 stations reported zero temperatures or lower.

HUMIDITY.

he mean relative humidity for the State was about 4 per t above normal. The extremes at Columbia, as recorded by hair hygrograph, were 97 and 27 per cent, the former oc- ring on the 16th and the latter on the 8th.

PRECIPITATION.

he average precipitation for the State, 78 stations reporting, 2.77 inches. The departure from the normal for 65 stations having 10 or more years' record was plus 0.55 inch. The monthly means and departures for the five divisions were as follows: northeast plain, 1.95 inches, deficiency .05 inch; southeast lowlands, 7.42 inches, excess 3.89 inches; Ozark plateau, 2.98 inches, excess .52 inch; southwest plain, 2.14 inches, excess .17 inch, and northwest plateau, 1.00 inch, deficiency .45 inch. The greatest local monthly precipitation was 9.38 inches, at Caruthersville, and the least was 0.35 inch, at Bethany.

The snowfall was the heaviest for December during the past 27 years, the average for the State being 7.8 inches.

The number of days with 0.01 inch or more precipitation was 6.

WIND.

The prevailing winds were from the northwest. There were no high winds, and the average hourly velocity was practically normal.

SUNSHINE AND CLOUDINESS.

The month was not unusually cloudy. The percentage of possible sunshine for the State, as a whole, was only 4 below normal. At Columbia, however, the percentage of the possible was about 11 below normal.

MISCELLANEOUS PHENOMENA.

Fogs—7th, 15th, 16th, 28th and 31st. Halos, solar—2d, 6th, 9th, 20th, 22d and 23rd. Halos, lunar—19th, 20th, 22nd, 24th, 26th and 27th. Sleet—10th, 11th and 15th. Thunderstorms—10th, 16th and 31st.

ERRATA FOR NOVEMBER, 1915.

Harrisonville—Mean minimum temperature should be 36.4, and the monthly mean should be 47.8.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

STATIONS	Mean Barometric Pressure (Sea-level)	Mean Relative Humidity.		SUNSHINE		WIND.				
								Max. Velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	30.06	80	......	130	44	6,693	9.0	26	se	10
Hannibal	30.08	81	......	......	......	6,724	9.0	30	e	10
Kansas City	30.05	78	65	158	54	8,795	11.8	33	nw	1
St. Joseph	30.04	81	68	122	42	6,562	8.8	31	nw	1
St. Louis	30.07	82	74	135	46	9,430	12.7	40	s	22
Springfield	30.05	82	74	155	52	8,451	11.4	30	se	10
Cairo, Ill	30.07	80	69	......	......	6,685	9.0	30	se	26
Keokuk, Iowa	30.09	84	82	118	40	4,952	6.7	33	w	23

COMPARATIVE DATA FOR DECEMBER.

YEAR	Temperature				Precipitation				Number of Days			
	Mean	Departure	Highest	Lowest	Mean	Departure	Greatest in 24 hours	Total snowfall unmelted	With .01 inch or more	Clear	Partly Cloudy	Cloudy
1888	35.9	+1.7	70	0	2.29	+0.24	......	....	6	....	....	....
1889	46.8	+12.6	78	2	0.96	−1.09	......	....	5	....	....	....
1890	36.0	+1.8	76	−3	1.03	−1.02	......	....	3	....	....	....
1891	39.8	+5.6	72	−1	1.90	−0.15	......	....	6	....	....	....
1892	29.4	−4.8	75	−22	2.38	+0.33	3.08	4.8	6	8	7	16
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+2.5	75	−7	2.13	+0.08	3.01	1.3	5	14	8	9
1895	34.3	+0.1	69	−8	6.13	+4.08	6.95	3.4	8	9	8	14
1896	38.6	+4.4	79	−5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	−4.9	74	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	−5.5	74	−20	1.69	−0.36	2.50	5.1	5	17	6	8
1899	30.4	−3.8	72	−13	2.11	+0.06	1.70	6.6	9	12	9	10
1900	35.6	+1.4	68	−3	0.69	−1.36	1.08	0.6	4	14	8	9
1901	28.5	−5.7	71	−29	2.93	+0.88	4.43	6.9	8	11	7	13
1902	30.7	−3.5	68	−7	2.91	+0.86	2.50	3.1	8	10	4	7
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	−0.9	66	−2	1.45	−0.60	2.24	1.7	4	18	6	7
1906	36.1	+1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	37.7	+3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.4	+4.2	80	−4	0.85	−1.20	1.35	T.	3	16	7	8
1909	24.9	−9.3	76	−17	2.86	+0.81	2.50	7.7	8	12	6	13
1910	31.2	−3.0	67	−5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+2.5	74	−11	2.80	+0.75	2.00	5.1	7	13	6	12
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+4.9	74	−3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	−7.1	68	−18	2.48	+0.31	2.30	6.6	9	7	5	19
1915	34.7	+1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13

Climatological data for December, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days				Prevailing direction of wind	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., 0.01 or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	0.95	−1.11	0.44	2.0	7	15	3	13	se	C. Randecker.
Brunswick	Chariton	652	36	32.2	+0.2	54	3	2	28	31	1.52	−0.20	0.68	10.0	6	11	2	18	w	Louis Benecke.
Columbia	Boone	784	26	33.3	+0.4	54	22	0	28	25	1.67	−0.34	0.86	15.1	6	5	14	12	e	U. S. Weather Bureau.
Fayette	Howard	725	31	30.2	−2.1	52	8	−6	28	26	1.55	−0.24	1.20	10.0	4	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	21	33.2	+0.5	56	8^{+}	−10	28	36	1.20	−1.05	0.38	7.4	5	14	4	13	nw	L. A. Hagley.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	0.76	−1.26	0.27	1.4	6	6	6	19	nw	J. W. Pulliam.
Hannibal	Marion	534	23	31.4	+0.1	54	8	−2	28	23	2.24	+0.59	0.90	13.2	10	11	7	13	e	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	1.51	−0.31	0.68	14.0	7	9	6	16	sw	C. T. Mausund.
Jefferson City	Cole	628	30	32.9	−0.3	57	22	0	29	30	2.31	+0.40	0.85	16.6	9	15	2	14	w	Miss Emma Smith.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	2.62	......	0.85	11.5	5	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	33.4	+2.3	54	8	−8	28	50	1.65	−0.27	0.60	17.0	6	15	5	11	ne	T. T. Farrell.
Macon	Macon	881	18	29.6	0.4	54	8	0	28^{+}	35	1.45	−0.07	0.83	11.0	7	9	9	13	sw	John A. Cook.
Mexico	Audrain	797	38	30.1	−2.1	54	8	−5	28^{+}	32	4.11	+2.01	1.14	15.8	10	13	3	15	nw	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	31.6	−0.2	56	8^{+}	6	28	31	2.41	+0.31	0.85	14.2	6	7	12	12	w	E. E. Stines.
Palmyra	Marion	652	4	28.8	.....	52	8	−8	28	39	3.11	+1.31	1.05	10.5	3	9^{a}	6^{a}	15^{a}	sw	W. B. Markell.
St. Catherine	Linn	914	3	30.2	.....	52	3^{+}	−6	28	31	0.90	......	0.72	12.0	5	8	11	9	e	L. D. Baker.
St. Charles	St. Charles	614	38	34.1	−0.7	56	8^{+}	4	28	30	2.13	+0.05	0.58	8.0	6	10	6	15	nw	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	35.4	−0.1	56	22	12	28	22	3.34	+1.11	1.18	13.0	9	9	8	14	nw	U. S. Weather Bureau.
St. Louis (2)	......do.	578	4	34.1	.....	54	22	11	28	22	4.36	......	1.71	24.5	7	12	6	13	nw	St. Louis University.
Steffenville	Lewis	576	23	30.8	+0.4	55	8	−8	28	43	1.70	−0.04	0.85	13.0	7	10	9	12	w	Frank Hall.
Unionville	Putnam	1,072	23	27.6	−0.4	56	7	−1	28	32	0.80	−0.83	0.32	2.0	4	12	4	15	nw	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	1.50	......	1.38	14.5	2	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	30.8	−1.5	53	22	4	28^{+}	30	2.06	−0.20	0.86	16.0	8	7	9	15	nw	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	.....	....	....	....	....	....	7.90	......	2.05	3.0	9	12	1	18	w	D. L. Albert
Cardwell	Dunklin	225	5	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	....	E. M. Perry.
Caruthersville	Pemiscott	220	25	42.6	+2.9	65	16	25	20	27	9.38	+5.16	2.22	T.	12	12	3	16	se	H. E. Averill.
Doniphan	Ripley	440	11	38.6	+1.2	61	8^{+}	19	20	34	6.66	+3.85	2.20	1.0	9	12	2	17	nw	W. W. Martin
Jackson	Cape Girardeau	458	25	39.0	+2.5	63	17	19	28	31	7.17	+3.89	3.20	5.2	9	6	7	18	n	L. M. Bean.
Marble Hill	Bollinger	420	24	37.8^{a}	+1.8	60	8^{+}	19	27	32	5.95	+2.79	2.50	4.0	6	10	11	10	n	Dr A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	8.07	+3.85	2.40	2.0	12	9	4	18	nw	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	6.64	......	2.60	4.0	8	14	0	17	n	George F. Ellis
Poplar Bluff	Butler	333	12	39.8	+2.2	63	9	20	20	31	8.71	+4.99	2.37	2.0	9	13	3	15	.....	Albert E. Cox
Sikeston	Scott	328	15	40.9	+2.6	68	2^{+}	19	28	31	7.15	+3.31	1.85	1.0	12	12	5	14	s	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	39.3	+0.8	62	16	20	28	25	6.61	+3.28	1.89	1.5	12	8	7	16	s	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	2.07	+0.51	0.55	11.5	9	15	2	14	nw	G. V. Randolph.
Bagnell	Miller	504	....	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. Nellie V. Houser
Birchtree	Shannon	1,200	22	37.6^{b}	+1.6	59	3	19	18	34	3.56	+1.06	1.72	2.0	8	17	2	12	n	V. H. Kirkendall.
Bolivar	Polk	1,020	28	37.0	+1.2	61	10^{+}	3	28	32	3.21	+0.74	1.00	16.0	4	16	5	10	sw	A. C. Fink.
Cassville	Barry	1,500	5	37.2	.....	62	20	14	3	45	3.51	......	1.27	4.0	7	10	8	14	nw	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	34.3	.....	65	23	5	28	32	1.50	......	0.70	9.0	3	15	5	11	s	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	41.8	+4.2	84	3	14	2^{+}	59	3.19	+1.13	1.24	1.5	6	19	3	9	sw	H. E. Dean.
Eldon	Miller	934	15	34.3^{a}	.....	60	22	−1	28	33	2.26	−0.07	1.05	17.0	4	9	15	7	e	Edward H. Shepherd
Fruit City	Reynolds	1,150	3	38.6	.....	60	8	22	28	33	4.80	......	1.30	3.0	8	11	12	8	e	R. C. Walton.
Gano‡‡	Dent	1,250	12	35.6	−0.1	56	3	10	28	30	3.30	+1.44	0.90	5.6	7	13	5	13	nw	A. C. Leach.
Goodland	Iron	1,000	11	35.9	+1.1	59	3	10	28	41	2.11^{**}	−0.07	0.96	4.0	5^{**}	15	7	9	n	F. M. Adams.
Hollister	Taney	1,000	7	51.4	.....	68	6^{+}	18	20	46	2.60	−0.37	1.60	0.0	4	17	0	14	sw	W. P. Chapmann
Houston	Texas	1,280	23	37.6	+1.4	60	5	14	28	32	3.11	+0.99	1.60	2.2	9	13	2	16	se	R. F. Harmon.
Ironton	Iron	925	38	35.7	+1.4	58	3^{+}	17	26^{+}	35	4.06	+1.05	1.35	7.2	8	4	13	14	n	W. H. Delano.
Koshkonong	Oregon	911	15	40.5	+3.2	68	5	20	28	33	4.54	+1.48	1.60	1.0	9	8	7	16	nw	R. M. Hitt.
Lebanon	Laclede	1,265	27	36.6	+1.2	62	5	5	28^{+}	39	2.54	−0.22	1.07	9.0	8	13	8	10	w	O. L. Weissgerber.
Lockwood	Dade	1,088	21	35.4	−0.5	57	8	6	28	22	3.41	+1.45	1.18	7.5	6	9	11	11	sw	C. S. Crow.
Mountain Grove	Wright	1,490	17	36.6	+1.9	62	5	14	28	31	1.93	−0.31	0.75	1.5	7	5^{i}	5^{i}	12^{i}	nw	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	40.6^{f}	+4.0	65	31	9	28	34	3.48	+0.80	0.80	5.0	6	13^{i}	6^{i}	6^{i}	sw	J. R. White & Son.
Neosho	Newton	1,083	33	40.2	+3.7	66	9	11	28	40	2.93	+0.29	0.86	3.5	6	16	1	14	sw	W. O. Buck.
Rolla	Phelps	1,139	34	34.6	+1.3	60	31	8	28^{+}	32	1.76	−0.63	0.64	8.2	7	17	6	8	e	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	37.6	+2.1	60	22	12	28	27	3.21	+0.54	0.77	7.0	8	14	7	10	se	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	36.6	.....	68	10	2	28	33	3.20	......	1.20	10.0	6	13	8	10	ne	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	E. F. Hirni
Clinton	Henry	800	29	35.6	.....	62	10^{+}	0	28	32	2.85	+0.99	1.00	13.0	6	7	11	13	se	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	32.8	+1.6	56	22	2	29	35	0.55	−1.36	0.47	6.0	3	9	0	22	w	A. J. Sharp.
Lamar	Barton	964	35	37.2	+1.8	65	31	5	28	36	2.45	+0.43	0.56	7.0	8	14	2	15	se	E. H. Adams.
Lamonte	Pettis	863	27	33.0	.....	59	23	−13	28	33	1.27	−0.57	1.00	15.0	3	7	18	6	ne	J. Ed. Hall.
Marshall	Saline	779	25	32.6^{a}	+1.4	54	22	−6	28	29	2.63	+0.84	1.20	14.0	6	22	0	9	nw	Prof. W. H. Black.
Nevada	Vernon	860	22	36.1	.....	63	10	4	28	33	2.61	+0.59	1.05	12.2	5	16	5	10	nw	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	W. E. Mathews
Warrensburg	Johnson	883	37	34.2	+0.2	60	22	2	28	29	1.68	−0.18	1.28	18.0	4	11	11	9	nw	Geo. H. Collins.
Warsaw	Benton	883	11	36.4	+1.2	63	10	−6	28	38	2.68	+0.72	1.07	14.5	6	11	14	6	se	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	1.51	......	0.82	11.3	7	11	4	16	nw	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	33.5	+3.2	54	8	8	28^{+}	26	1.10	−0.73	0.60	8.0	3	14	5	12	nw	F. G. Ashbaugh.
Bethany	Harrison	881	26	28.8	−3.2	50	22	−4	28	29	0.35	−1.21	0.25	2.5	2	9	7	15	nw	M. H. Moulton.
Chillicothe	Livingston	.....	1	....	.....	....	....	....	....	....	0.73	−1.30	0.45	7.0	4	10	3	18	.....	Hocey O. Dupy
Conception	Nodaway	982	31	29.9	+0.1	55	22	2	28	26	0.75	−0.40	0.35	3.5	3	9	9	13	ne	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	30.0	+2.2	52	7^{+}	1	28	26	0.45	−0.79	0.25	2.0	2	13	2	16	nw	W. H. Campbell.
Kansas City	Jackson	963	27	31.8	+3.3	61	22	9	29	24	1.12	−0.24	0.49	5.2	6	12	8	11	e	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	31.9	+2.0	58	22	8	28	29	0.96	−0.51	0.75	7.2	4	15	7	9	nw	J. F. Sharp.
Lexington	Lafayette	813	31	33.1	+2.1	58	22	0	28	26	1.39	−0.48	0.80	10.0	5	14	0	17	w	J. W. Keithley.
Liberty	Clay	864	27	31.2^{a}	+2.6	62	22	3	28	34	1.33	−0.09	0.60	6.0	4	18^{a}	5^{a}	7^{a}	nw	W. C. Wilmott.
Maryville	Nodaway	1,160	25	28.6	+2.3	57	22	0	28	38	0.72	−0.47	0.27	2.5	4	15	2	14	e	J. R. Brink.
Oregon	Holt	1,113	60	31.2	+2.5	57	22	0	28	27	1.22	−0.30	0.57	5.5	5	10	8	13	se	Tom Curry.
St. Joseph	Buchanan	967	11	32.0	.....	59	22	4	28	25	1.86	+0.83	0.74	4.4	7	8	10	13	nw	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	31.0	.....	60	22	0	28	32	0.61	......	0.19	3.0	3	15	4	12	nw	John F. Frazier.
Trenton	Grundy	812	21	31.6	+1.9	53	7	0	28	30	1.36	−0.20	0.62	5.0	8	10	8	13	ne	W. H. Estes.
Section means and extremes		..		31.7	+1.3	84	3	−13	28	59	2.77	+0.55	3.20	7.8	6	12	6	13	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports a
used in determining section, or division means.

[illegible] appearing in the table indicate number of days missing: for example, ᵇ represents two days, etc.

+ Also on other dates. ** Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R F
No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for December, 1915.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ville	Missouri											.06				.04	.03	.08							.20	.44		T.				.10	0.95
wick	Grand											.16		T.			.06								.26	.68		.10				.26	1.52
bia**	Missouri	T.									.03	T.	T.		T.	.04	.18	T.					T.		.86			.23				.33	1.67
r	do																																
n	do											.12	T.			T.	.29								.36			.38				.05	1.20
	Mississippi										.27					.13	.05						.07		.14							.10	0.76
bal**	do	T.									.11	.15	.01			.16	.76		T.				.01	.03	.79	T.		.65			T.	.17	2.24
ann‖	Missouri											.08	.01	T.		.01	.09	.12							T.	.68		T.	.52				1.51
son City‖	do											.14	.10			.05	.25	.10							.20	.85			.40			.22	2.31
sville	Chariton																																
iana	Mississippi	T.									.12	.50		T.	.10	.31									.60			.02					1.65
n	Chariton											.24	.11	T.		T.	T.	.05		T.				T.	.18	.65		T.	.05			.17	1.45
eo	Mississippi		T.									.06	.01	.01		.03	.12	.12						T.	.09	1.14			2.50			.03	4.11
ld	Meramec										T.	.50	T.		T.	.09	.46								.85	T.		.49				.02	2.41
ra	Mississippi											.67					T.	.64							.75	1.05		T.					2.11
t erne	Grand	T.										.10	T.	T.	T.	T.	.01	.02		T.					.72			T.				.05	0.90
arles	Missouri											.58	T.			.15	.40								.50			.40				.10	2.13
uis (1)**	Mississippi										.34	.55	.01		.02	.28	.47								1.18	T.		.39	T.	T.		.10	3.34
uis (2)	do										.35	.53	T.		.01	.31	.59								1.71			.74				.12	4.36
nville	do	T.									.10	.25	.03			.10	.30			T.				T.	.85	.07		T.					1.70
ville‖	Grand	T.									.32			T.		T.	T.	.20		T.				.03	.25	T.		T.				T.	0.80
alia	Mississippi																																
nton‖	do											.20	.08	.04		.01	.05	.26								.86			.56				2.06
theast Lowlands.																																	
Girardeau	Mississippi											2.05	.20			.05	1.60	1.70	.20							.60			1.20	.30			7.90
well	do																																
ersville	do	.02				T.						1.00	T.			.90	2.22	1.07							.25	.17		.10	1.10	1.75	.05	.75	9.38
han	Black										T.	.95				.10	2.20	.32							.25			.25	.80	.65		1.14	6.66
on	Mississippi	.03									1.75	.19					3.20								.50	.02		.18	.74			.56	7.17
e Hill	do											1.70				.10	2.50	.25										.40				1.00	5.95
Madrid	do	.01	T.			.02						1.40	.04			.10	.50	2.40	.25							.45			1.10	1.77	.03		8.07
n (near)	do											1.30				.24	2.60	.75							.40	.10		.65		.60			6.64
r Bluff	Black	.02										2.37	.03			.03	1.23	1.79							T.	.53		T.	2.09			.62	8.71
ton	Mississippi					.03						1.85				.28	1.23	.58							.20	.15		.10	1.10	1.10	.05	.38	7.15
ill**	do	.03				T.			T.		.45	.92	T.		.01	.57	1.67	.20							.33	T.		.38	.65	.64	T.	.76	6.61
rk Plateau.																																	
gton‖	Gasconade											.20	.06			.12	.55	.12							.12	.48	.06	T.	.36				2.07
ell	Osage																																
tree	Black											.48				.14	1.72	.13							.30			.20	.40			.19	3.56
ar	Osage						T.				.86						.75						T.		1.00			.60					3.21
ille	White											.68					1.27	.02							.61	T.		.16		.08	T.	.69	3.51
er	Gasconade												T.				.67									.70	.13						1.50
	Neosho						.02					.45					1.24								.58			.05				.85	3.19
n	Osage											.15	T.		T.		.41								1.05			.65					2.26
City	Black											.80				.20	1.10	1.30										.20	.30	.70		.20	4.80
	Meramec											.90	T.			.17	.48	T.							.54	.14		.37	.70	T.			3.30
land	Black											.65	T.				.96	.10								.10			.30				2.11
ster	White											.80												.40							.40	1.00	2.60
ton	Gasconade											.60	T.		T	T.	1.00	T.							.40	.05	.14	.23	.10	.24	T.	.35	3.11
all	Mississippi											1.35	.05			.22	.22	.70	T.						T.	.37			.75	.40			4.06
konong	Black											.87				.02	1.60	.21							.19			.23	.47	.33		.61	4.54
on‖	Osage											.25	.04			.01	.28	.12							.15	1.07		.62					2.54
wood	do											.65	T.				.63								1.18	.40		.28			T.	.27	3.41
tain Grove‖	White											.32	.02				T.	.75							.07	.51			.20	.06			1.93
t Vernon	Neosho											.80	T.		**	**	**	**	**	**	.93				.80			.25				.70	3.48
o	do											.43			T.		.86								.31	.44		.35			T.	.51	2.93
	Meramec											.19	.01			.11	.23	.19							T.	.64		T.	.39			T.	1.76
gfield**	White	T.				T.					.46	.09	.04			T.	.77	T.							.73	T.		.59	.05		T.	.48	3.24
tland	Osage																																
thwest Plain.																																	
et	Osage							T.			T.	1.20			T.	.01	.07								1.00			.42				.50	3.20
ton City	do																																
on	do											.30					.15								1.00		.90	.20				.30	2.85
sonville‖	do											T.				T.	.03								.05	.47	T.	T.					0.75
r‖	Neosho											.56					.52	.02							.39	.48		.03	.43			.02	2.45
ente	Missouri											T.				T.	.22								1.00		.05				T.		1.27
all	do											.68	T.			.05	.10								1.20			.20				.40	2.63
da	Osage										1.00	1.05			.34										1.00			.22					3.61
la	do																																
nsburg	Missouri											.18				T.	.13								1.28			.09				T.	1.68
aw	Osage											.34				.08	.42					T.			1.07	T.		.45				.32	2.68
rly	Missouri									T.						T.	.07	.15							.09	.82		.05	.10			.23	1.51
thwest Plateau.																																	
on	Grand												.25												.60							.25	1.10
any	do	T.						T.			T.	T.	T.	T.	T.	T.			T.				T.		.25			T.				.10	0.35
othe	do											.15													.45	.08						.05	0.73
ption	Missouri	T.									.20					T.	T.		T.						.35							.20	0.75
t City	Grand											T.	T.												.20	T.	T.					.25	0.45
as City***	Missouri											.03				.03	.08								.49			.09				.40	1.12
r‖	Grand											.14		T.		.03	.04								.75								0.96
gton‖	Missouri											.05				T.	.14									.80		T.	.20			.20	1.39
ty	do											.30				.15	T.								.60							.28	1.33
ville‖	do		T.									.27					.10	.10							.25								0.72
n	do										.06		.04			.05									.50			T.				.57	1.22
seph***	Missouri										.42	T.	T.			.02	.04		T.					.10	.64		.03	T.	T.		T.	.61	1.86
o	do																																
ton	Grand	T.									.06		T.		T.	.07	T.		.03					.41	.04		.04				.09	.62	1.36

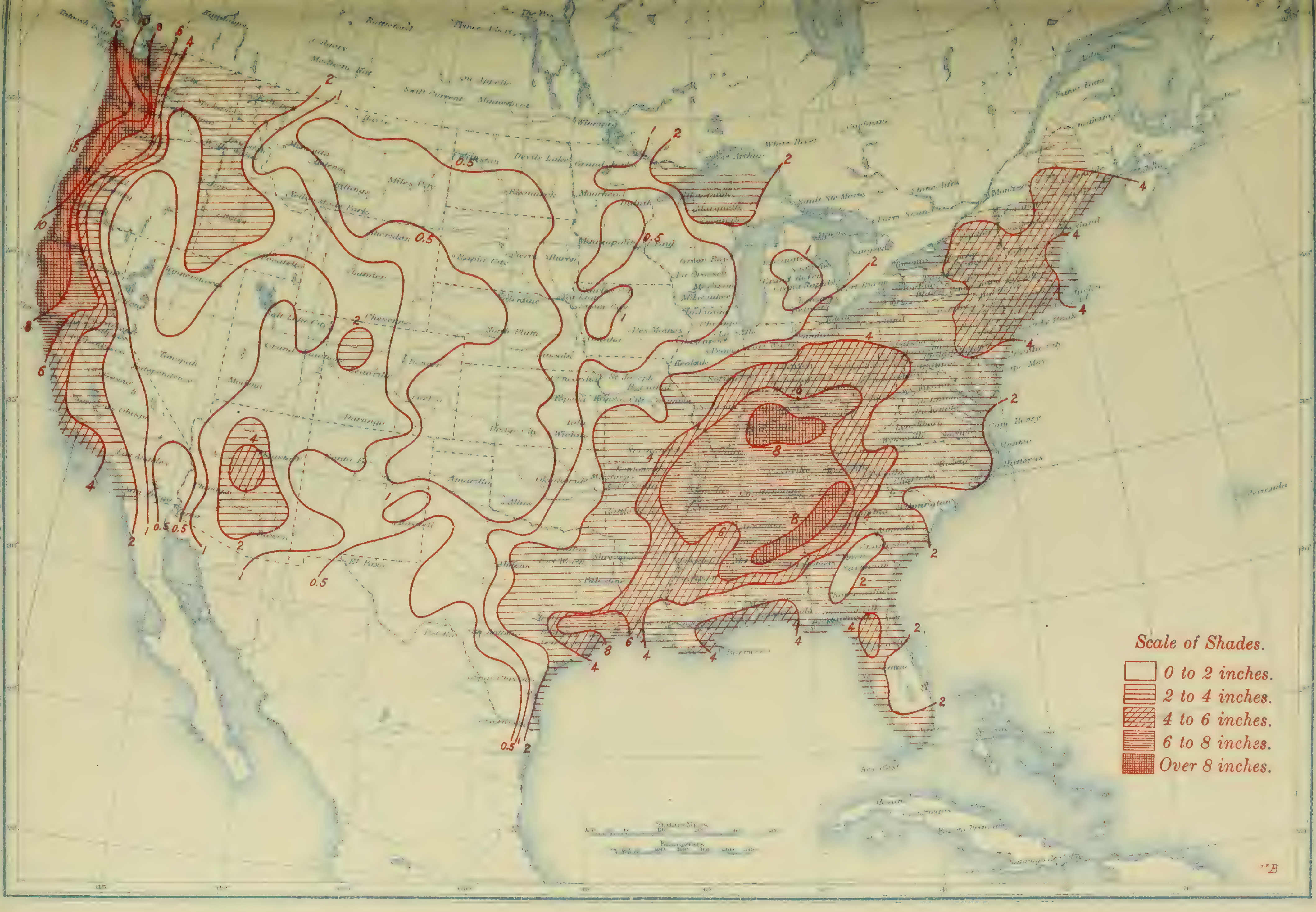
Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.
T. Trace, or less than 0.01 inch.
*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.
** Precipitation in the next following measurement.
‡ Separate dates of fall not recorded.

Daily temperatures for December, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	43	41	51	50	49	47	51	48	42	45	32	35	40	32	37	38	30	41	40	47	46	52	49	33	31	43	21	23	33	30	48
	Minimum	21	21	20	28	29	31	31	31	25	33	31	30	24	20	22	31	22	19	18	20	23	24	31	31	24	22	19	2	12	18	28
Columbia	Maximum	43	39	49	49	45	45	47	53	42	45	35	35	37	32	33	41	32	39	37	44	43	54	49	38	28	46	24	26	30	38	42
	Minimum	28	21	32	30	32	30	32	35	29	35	30	31	27	20	32	32	21	21	21	24	31	29	37	26	23	26	15	0	10	20	35
Fayette	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	Maximum	42	38	47	43	43	40	46	54	38	37	33	34	32	26	32	35	34	38	34	45	46	51	48	37	27	42	32	20	22	32	30
	Minimum	29	21	30	27	30	28	29	32	25	32	30	30	22	15	26	32	24	20	19	22	31	29	36	24	21	20	15	-2	13	23	32
Jefferson City §§	Maximum	47	41	51	50	48	45	50	48	45	48	33	36	43	35	37	42	33	41	38	44	46	57	52	33	31	45	24	23	30	39	35
	Minimum	25	20	22	28	29	29	29	32	26	29	33	29	31	20	22	32	28	19	20	23	25	28	31	31	25	21	23	11	0	12	27
Macon §§	Maximum	41	37	50	45	46	44	45	54	40	38	31	33	33	28	32	34	26	38	35	44	43	52	47	30	35	44	22	26	35	35	41
	Minimum	20	18	18	24	24	26	26	31	27	25	30	28	25	14	14	27	24	16	17	17	23	27	29	30	24	18	18	0	0	7	25
Mexico §§	Maximum	46	40	51	46	46	43	50	54	42	42	33	33	39	29	34	35	27	39	39	46	43	52	48	31	29	42	22	19	26	35	44
	Minimum	21	29	19	24	26	26	26	31	26	26	33	29	27	15	15	15	26	20	19	19	20	29	29	29	18	22	22	-5	5	1	24
Oakfield	Maximum	51	42	54	48	49	45	53	56	45	42	38	33	41	31	33	36	37	40	33	45	50	56	53	45	30	49	45	24	38	42	40
	Minimum	38	22	28	28	30	27	28	38	25	32	32	30	29	18	27	31	26	21	22	24	30	30	39	26	20	18	19	16	18	23	30
St. Catharine	Maximum	40	38	52	44	45	43	50	52	46	36	36	33	36	32	32	33	29	36	36	43	46	46	47	32	30	37	31	25	32	31	37
	Minimum	25	15	25	25	28	27	29	36	25	31	28	28	24	13	22	29	20	14	15	17	27	23	29	26	20	19	17	-6	4	22	25
St. Louis (1)	Maximum	51	41	52	47	47	43	52	55	41	42	38	35	40	34	33	39	37	39	36	42	48	56	52	41	30	46	40	26	34	40	41
	Minimum	32	28	33	30	32	29	31	35	30	33	33	32	31	21	27	32	27	25	25	28	33	35	41	26	24	24	19	12	22	31	32
Unionville §§	Maximum	33	38	50	45	46	44	56	52	34	38	30	32	30	26	30	31	26	32	31	42	40	46	44	31	30	35	22	24	34	35	40
	Minimum	18	14	18	20	22	25	24	34	25	22	24	26	21	9	12	22	20	10	12	18	24	26	28	27	22	20	15	-1	2	6	18
Warrenton §§	Maximum	46	38	50	46	45	41	50	51	41	41	33	34	36	30	33	36	30	38	36	43	46	53	48	33	28	45	22	21	31	38	47
	Minimum	21	20	20	26	23	26	24	27	25	25	33	29	26	16	18	28	29	20	20	21	24	27	29	31	27	15	22	4	4	13	28
Southeast Lowlands.																																
Cardwell	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Caruthersville	Maximum	50	48	56	56	50	55	50	63	51	63	53	40	46	40	43	65	60	40	47	49	53	57	56	58	58	54	58	45	36	41	56
	Minimum	37	31	29	30	42	36	31	36	34	38	40	36	37	29	34	42	37	30	30	25	29	30	43	41	32	30	35	26	30	34	34
Doniphan	Maximum	55	49	59	55	55	50	50	61	52	57	54	41	45	38	40	61	58	39	45	49	50	54	56	50	40	54	50	30	34	39	43
	Minimum	34	24	25	25	25	34	25	33	26	38	36	33	33	24	33	34	31	23	26	19	21	23	34	33	28	24	30	21	28	31	32
Jackson	Maximum	51	49	58	56	58	55	54	59	55	55	52	42	44	43	39	60	63	46	43	47	49	54	56	51	45	49	46	35	35	34	40
	Minimum	35	26	29	27	34	27	25	32	26	30	36	33	34	24	30	34	32	28	29	22	26	28	38	30	26	26	27	19	20	30	31
Marble Hill	Maximum	55	48	57	57	55	50	50	60	55	50	52	39	46	39	35	59	60	36	45	41	49	45	55	52	52	49	30	33	33	35	....
	Minimum	35	25	25	25	35	30	30	32	25	30	38	35	33	30	25	35	30	22	29	20	25	25	33	25	20	29	19	22	30	30	....
Poplar Bluff §§	Maximum	46	54	49	58	55	50	50	52	63	51	55	48	41	48	38	42	60	37	39	48	49	52	57	56	42	45	54	53	47	42	42
	Minimum	28	28	27	27	33	32	26	31	38	36	45	33	35	24	31	37	37	26	26	20	22	26	35	39	29	25	39	22	26	32	33
Ozark Plateau.																																
Birchtree	Maximum	52	45	59	....	53	55	52	57	53	50	45	44	44	38	38	55	53	38	44	48	49	57	52	48	36	....	59	28	40	43	42
	Minimum	35	25	25	....	30	29	25	27	27	35	30	30	28	25	30	36	25	19	23	25	25	26	35	31	26	....	25	25	25	29	32
Cassville	Maximum	45	60	56	58	60	59	60	59	61	61	56	58	49	48	53	51	39	43	54	62	52	49	51	56	40	50	41	29	39	42	55
	Minimum	15	15	14	18	23	24	27	30	25	20	31	24	24	21	24	28	22	22	22	24	27	28	30	24	21	23	16	15	23	25	28
Eldon	Maximum	47	42	45	55	45	40	51	55	50	53	44	35	39	35	39	47	37	42	39	47	46	60	50	41	38	48	40	21	....	45	39
	Minimum	30	20	26	24	30	29	27	35	23	32	29	28	29	28	31	35	23	18	19	21	29	27	35	22	21	19	11	1	....	14	29
Fruit City	Maximum	55	48	59	53	56	51	50	60	46	49	48	35	44	39	37	52	53	49	42	49	47	57	52	49	35	54	49	29	35	35	40
	Minimum	35	27	26	32	39	31	28	40	30	36	33	31	31	24	31	35	28	26	29	24	27	31	38	32	26	30	29	22	27	27	32
Gano	Maximum	49	40	56	52	55	51	52	55	51	50	45	32	36	37	37	46	43	39	38	42	46	55	55	48	30	50	44	28	38	41	46
	Minimum	33	20	30	22	30	26	28	35	24	35	30	28	30	20	30	35	34	19	23	23	30	30	37	29	23	22	18	10	17	29	33
Hollister	Maximum	56	50	62	66	58	68	64	66	62	64	44	42	40	40	50	48	46	48	50	56	54	68	45	46	44	62	42	38	34	56	58
	Minimum	38	20	20	28	34	38	40	32	26	34	36	34	32	30	36	34	30	20	26	18	24	22	32	30	28	28	36	28	28	36	40
Ironton §§	Maximum	53	45	58	51	52	46	51	58	50	49	40	36	43	33	38	55	44	40	42	48	49	55	56	44	32	51	42	28	38	37	45
	Minimum	36	25	23	20	27	23	20	33	22	28	39	31	31	19	28	30	33	20	25	18	21	22	31	33	25	17	25	17	23	26	31
Lebanon §§	Maximum	52	45	58	61	62	55	51	59	56	57	33	35	45	38	52	58	26	41	45	50	46	61	56	34	40	52	29	34	44	43	57
	Minimum	22	19	20	28	34	32	32	34	26	29	33	29	25	24	27	36	26	19	21	26	30	31	31	34	23	22	29	5	5	12	31
Mountain Grove §§	Maximum	46	48	56	60	62	53	49	57	54	50	35	35	42	34	50	52	33	41	42	45	46	53	52	35	36	53	30	29	43	42	57
	Minimum	24	22	25	30	37	36	30	32	27	31	34	29	25	24	29	35	30	19	20	25	27	30	27	35	25	25	30	14	15	29	30
Neosho	Maximum	58	44	59	63	60	54	57	58	66	64	60	44	47	47	65	65	40	44	43	48	51	65	60	49	39	54	45	31	37	42	55
	Minimum	32	16	31	28	33	41	43	27	26	42	32	32	21	26	43	37	25	19	21	22	27	27	29	30	18	31	20	11	22	26	40
Rolla §§	Maximum	49	42	51	55	53	52	50	55	52	49	35	34	40	34	40	46	29	40	40	46	46	57	53	34	35	45	27	30	40	40	60
	Minimum	20	19	21	26	28	29	28	31	25	25	33	29	30	23	23	30	28	20	20	23	25	30	35	33	24	22	26	8	8	17	31
Springfield	Maximum	46	39	56	57	53	52	52	55	55	53	47	35	39	38	47	58	31	40	39	44	46	60	50	43	32	53	36	31	42	41	48
	Minimum	27	22	31	38	39	40	38	37	34	41	29	29	25	28	35	31	22	23	25	27	32	33	38	27	21	30	17	12	19	30	38
Southwest Plain.																																
Amoret	Maximum	48	44	58	59	59	57	57	59	57	68	61	46	44	39	49	48	35	46	43	49	50	66	54	49	33	46	39	22	27	36	42
	Minimum	19	19	30	26	29	28	36	30	25	37	60	30	23	25	35	31	20	18	18	21	23	29	34	30	11	24	18	2	7	15	32
Clinton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Harrisonville §§	Maximum	41	42	42	52	47	52	55	55	50	55	45	42	40	36	40	38	30	41	40	46	48	56	50	42	30	42	30	19	27	37	51
	Minimum	29	18	18	26	27	30	33	32	25	26	35	32	22	22	25	30	22	23	20	24	30	28	32	33	13	13	19	3	2	6	16
Lamar §§	Maximum	48	44	52	61	56	55	53	60	62	61	33	39	43	43	58	58	33	43	45	47	48	64	52	35	39	51	22	28	41	42	65
	Minimum	25	18	18	32	35	41	43	31	30	34	33	32	24	25	33	42	24	20	21	20	22	32	33	34	15	15	21	5	6	23	34
Lamonte	Maximum	45	41	48	52	48	52	50	52	54	53	51	42	40	31	33	40	34	40	42	45	46	45	59	38	31	43	33	20	32	41	40
	Minimum	19	18	33	26	29	31	31	33	31	30	29	30	29	20	29	30	22	16	17	20	19	30	28	29	18	22	16	-13	0	11	27
Marshall	Maximum	....	40	48	49	48	45	51	53	45	49	43	35	38	34	34	39	35	39	37	45	43	54	50	43	29	41	35	21	28	37	38
	Minimum	29	17	29	26	34	32	29	33	25	34	29	29	30	21	26	32	22	17	17	20	30	25	33	27	19	21	18	-6	4	22	33
Warrensburg	Maximum	45	43	54	55	51	53	55	53	53	54	45	38	41	34	39	40	33	43	42	48	47	60	51	40	30	33	33	18	26	36	41
	Minimum	30	19	31	26	30	37	32	35	26	34	30	30	29	24	29	29	22	19	20	24	35	31	34	28	14	26	11	2	5	16	33
Warsaw	Maximum	47	43	55	60	53	50	51	55	55	63	53	36	41	35	42	59	38	45	45	48	49	61	58	48	34	47	40	30	38	44	47
	Minimum	31	17	33	23	33	37	30	28	21	39	31	30	30	20	35	37	24	18	21	20	25	23	34	29	27	21	18	-6	5	13	35
Northwest Plateau.																																
Avalon	Maximum	39	40	52	49	48	47	52	54	52	42	40	34	36	34	32	33	35	38	37	45	44	53	52	45	32	39	39	22	33	35	37
	Minimum	30	18	30	27	29	30	34	35	26	34	30	30	27	19	27	31	20	22	18	25	30	30	35	29	24	25	20	8	8	22	32
Grant City	Maximum	35	42	51	45	44	45	52	52	46	35	34	34	37	33	35	31	29	34	35	36	43	51	50	40	33	36	33	24	30	30	36
	Minimum	27	14	25	22	25	32	35	35	23	32	27	27	24	15	19	18	13	12	13	18	20	25	34	29	13	25	14	1	6	23	27
Kansas City	Maximum	40	43	51	52	49	52	57	54	49	45	35	42	41	33	36	36	30	42	40	46	49	61	48	36	32	40	26	24	31	34	42
	Minimum	27	22	33	31	33	40	38	38	32	35	31	30	28	23	33	26	20	22	22	25	34	37	36	28	19	26	15	11	9	23	33
Kidder §§	Maximum	37	41	53	47	42	46	53	52	44	39	29	35	38	29	32	32	25	31	36	44	41	58	47	31	31	37	18	22	22	34	38
	Minimum	28	20	29	24	28	35	36	38	24	34	29	29	25	18	29	31	17	20	18	19	31	29	33	30	12	27	16	8	11	18	34
Lexington §§	Maximum	44	42	50	51	50	49	55	54	47	47	32	37	41	28	35	35	30	41	40	46	47	58	50	32	33	42	25	22	29	35	39
	Minimum	30	20	31	27	30	36	31	36	26	32	32	39	30	23	27	33	22	18	19	27	32	32	36	32	18	24	20	0	4	18	32
Maryville §§	Maximum	32	44	54	47	45	46	53	52	40	36	30	34	36	28	31	31	31	35	35	40	44	57	45	33	33	35	21	24	30	32	37
	Minimum	26	16	16	25	25	25	25	32	24	24	27	23	25	16	16	26	12	12	14	13	20	27	32	29	12	12	14	0	2	10	22
Oregon	Maximum	38	43	49	47	46	48	52	51	44	38	35	37	37	32	32	33	28	37	39	41	45	57	52	40	32	37	33	21	30	32	38
	Minimum	26	16	26	25	27	34	38	32	27	31	26	27	23	19	26	25	14	15	15	20	28	30	31	28	11	23	11	0	5	22	26
St. Joseph	Maximum	35	44	51	50	48	46	51	52	45	40	32	38	38	31	33	33	26	37	38	44	47	59	47	34	32	35	20	24	30	33	39
	Minimum	24	20	31	28	30	36	37	34	29	32	29	29	26	22	31	22	16	19	19	24	31	34	31	25	15	20	10	4	5	24	33
Trenton	Maximum	36	39	45	44	46	44	53	51	46	36	35	36	36	33	33	33	31	35	31	41	42	48	45	39	30	35	32	26	32	32	38
	Minimum	29	19	25	27	38	31	30	38	27	32	28	29	25	17	25	30	19	16	24	21	31	28	34	30	24	24	17	0	2	24	28

[illegible] etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged [illegible] preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

35
MS
Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

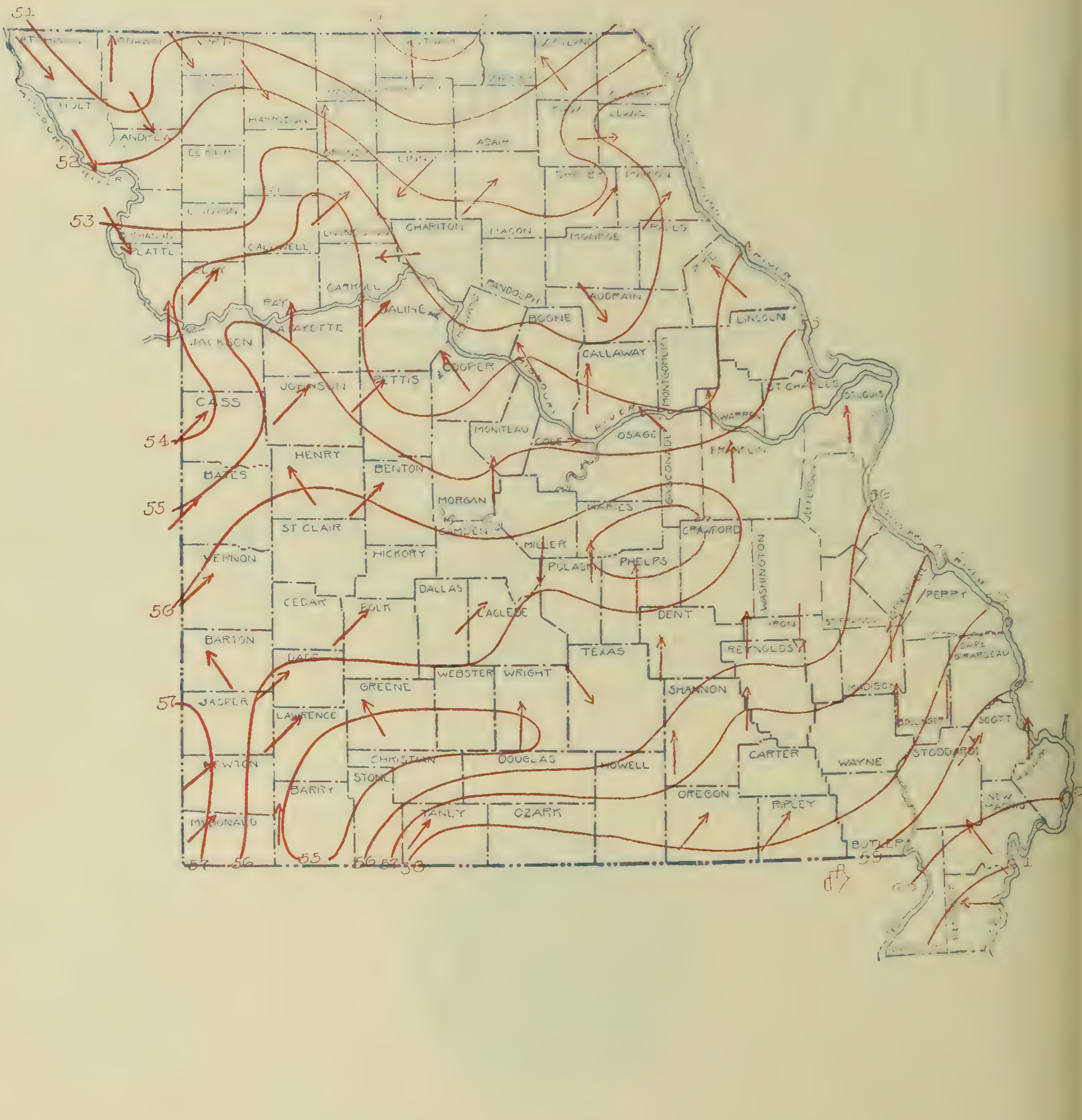
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

ANNUAL, 1915

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 27, 1916

MEAN TEMPERATURE AND PREVAILING WINDS FOR YEAR 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

OL. XIX. COLUMBIA, MO., YEAR, 1915. No. 13

GENERAL SUMMARY.

The year 1915 in Missouri was unfavorable for agriculture, iefly because of the excessive rains and floods of the summer, hich resulted in immense damage to hay and grain. From e viewpoint of the meteorologist, though, it was a remarkably teresting year.

There was little or no real spring weather, the summer was normally cool and wet, the autumn approached the ideal, d the winter, if we except the last ten days of January, was ry mild. February was 3° warmer than March, while ordin-ily it is more than 12° colder; and September was nearly warmer than August, whereas it is normally about 7° cooler. arch was much colder than usual, and April much warmer; the close of April vegetation was almost as luxuriant as it dinarily is the first of June. From May to August, the four incipal crop growing months, the weather was the coolest and ttest for any similar season covered by climatological records.

Notwithstanding the cold March and cool summer, the mean mperature for the year was 0.4° above normal, the deficiency curring in March, and the four months from May to August, ing a little more than counterbalanced by the excessive rmth of February, April and the last four months of the ar. Maximum temperatures of 100° or higher occurred at ly two stations; and there were but seventeen days with mperature 90° or higher, 3 occurring in May, 3 in June, 8 in ly and 3 in August. The last week of January was the cold- period of the winter, when temperatures were near zero in the uthern border counties, and as much as 20° and 24° below ro in the central and northern counties. The minimum for gust, 37°, on the 30th and 31st, is the lowest ever recorded that month, while the maximum for November, 84°, ex-ds all previous similar records for that month.

There were no killing frosts, as a rule, in the spring after the t four or five days of April. In the autumn the first killing st occurred on October 9th.

The year's precipitation, including rain, melted sleet and ow, was 49.62 inches, which is 11 inches above the normal, d the greatest yearly amount, with one exception, 1898, since beginning of precipitation records in 1867. There was an cess in every county, only a few counties receiving less than inches. The distribution for the year is graphically shown page 107. The four months from May to August, inclusive, e a total of 28.28 inches, which is not only about 10.65 hes above the seasonal normal, but is about 57 per cent of yearly total. During these four months forty-seven stations eived monthly amounts of 10 inches or more; twenty-four, inches or more; fifteen, 13 inches or more; nine, 14 inches more; three, 15 inches or more, and one, 20 inches or more. hile rains were more or less frequent in September, the period excessive rains came to an end with the passage of the West dian storm, on August 20th, which caused heavy damage in the stern half of Missouri from the southern border to north of Louis.

It is probably safe to say that the damage to crops and other perty by the cool and wet summer, floods, hail and wind is of the greatest in the history of the State. The damage to eat and corn alone, in Missouri, amounted to, as estimated the State Board of Agriculture, $1,500,000 and $11,000,000, pectively.

THE WEATHER BY MONTHS.

January.—The weather of the month did not vary much from the usual. The first half was mild, but the latter half, save the last two days, was almost continuously cold, with zero temperatures on several days. There was rather more precipitation than usual, most of it falling during the last two weeks. Snow covered the ground during the coldest period, which, while being favorable for wheat was rather hard on range stock. Business and traffic were about normal, except railway schedules were interrupted for several hours by a sleet and snow storm on the 22d, and again by severe weather on the 28th.

February.—Characterized by uniformly mild temperatures and excessive cloudiness, but the month was not abnormally wet. Maximum temperatures were higher than normal, but did not break previous records; the minimum, however, was the highest on record. It also is of interest to note that the warmth was appreciably greater in the northern than in the southern sections. There were no cold waves. Thunderstorms occurred on several days.

March. The month was noticeable for its excessive cloudiness, comparatively light winds, and uniformly low temperatures, without, however, any very cold weather. The monthly precipitation was about 50 per cent below the normal, but notwithstanding this fact, the soil was too wet for extensive plowing. Cattle stood the winter well. Wheat appeared in promising condition. The uniformly low temperatures retarded growth of vegetation, and was especially beneficial to fruit buds as they were made less liable to injury from frosts during the first days of April.

April.—Unusual warmth, small rainfall, and a large amount of sunshine were the marked features of this month. Except in one or two localities there were no freezing temperatures after the 3d or 4th, and all vegetation, which was backward for the season, made rapid growth after those dates. Plowing progressed on an extensive scale. At the close of the month pastures and meadows were beginning to feel the need of more moisture. During the afternoon of the 8th a severe local storm occurred in Webster County, but otherwise the month was remarkably free from severe atmospheric disturbances.

May.—The weather during this month was in marked contrast with that of the preceding month, being uniformly cold, unusually cloudy and wet. Continued excessive rains caused the Missouri and Mississippi and most of their tributaries to reach flood stages, and thousands of acres of fine farm lands were inundated. While temperatures were generally below normal, there was no extreme cold, the temperature of 32° occurring at but one station, on one date. Severe thunderstorms were frequent. The tornado, however, occurred but once, and this one formed in Greene County during the evening of the 20th.

June.—Continued cool weather, excessive cloudiness and precipitation, save in the southeast section; floods, and more or less severe local storms were the marked features of June. Harvest progressed under difficulties, and owing to lack of warmth, sunshine and cultivation, corn was backward. Thousands of acres of crops, and much other property, but little or no live stock, were destroyed by the flood waters of the Missouri River and its tributaries.

July.—Excessive cloudiness, much rain, and uniformly low temperatures in all divisions, except the southeast; flooded bottom lands, and few severe local storms were the more marked features of the month. Harvesting, haying, and other farming operations were much interfered with, and considerable grain was damaged. The most severe local storm of the month occurred in St. Charles County, embracing the villages of St. Charles, Gilmore, Wentzville, St. Peters and O'Fallon, during the afternoon of the 7th. Much property, including buildings, trees, and crops were destroyed. One person was killed at Wentzville, two at O'Fallon and one at Gilmore. There is some evidence that this storm was of the tornado type.

August.—From a meteorological standpoint this was a remarkable month, which closed an equally remarkable summer. It was abnormally cool, and excessively cloudy and wet in all divisions, save the northwest plateau. It was the coolest August since the beginning of temperature records in 1888, and the wettest in the past 48 years, Both the maximum and minimum temperatures were the lowest on record. Light frosts occurred at a few stations on the 30th, and at 11 stations on the 31st. Thunderstorms were frequent, and quite severe on several days; hail, however, fell on one day only.

September.—Temperature conditions were generally favorable, but prolonged cloudiness and frequent showers hindered late threshing, haying, and also plowing for fall seeding. The corn crop was in need of warm, drying-out weather, and consequently matured slowly. The Osage River and its tributaries flooded their bottom lands for the fourth time during the season, destroying many acres of corn that had been planted for the third and fourth time.

October.—This month was characterized by bright skies, moderate and uniform temperatures, and light precipitation. The weather was ideal for all outdoor pursuits. A moderate freeze occurred on the 9th, that was general outside of the larger cities. Only five Octobers in 48 years have been drier; and it is of interest to remark that it was the first month in 1915 since April with deficient precipitation.

November.—Although the month was windy, it was very mild, sunshiny, and highly favorable for autumn work. Considering the State as a whole, and the present month with October it may be safely said that rarely have weather conditions for two entire autumn months been so generally favorable for all outdoor occupations.

December.—The last five or six days of December were more or less unsettled and cold, but the first three weeks or more were mild as a rule, and generally favorable for building and other outdoor pursuits. The absence of snow until about the 24th permitted continued winter grazing. After the snows began, however, they were heavy and exceeded all previous records for December.

Comparative Annual Data for the State

Year	Temperature Mean	Temperature Maximum	Temperature Minimum	Precipitation	Year	Temperature Mean	Temperature Maximum	Temperature Minimum	Precipitation
[illegible]	[illegible]	111	32	[illegible]	1903	53.6	102	−25	40.15
[illegible]	[illegible]	107	9	37.91	1904	53.2	100	23	41.62
[illegible]	[illegible]	[illegible]	19	35.71	1905	53.6	103	40	45.43
[illegible]	[illegible]	[illegible]	11	[illegible]	1906	55.1	101	13	57.31
[illegible]	[illegible]	[illegible]	11	[illegible]	1907	55.6	109	15	41.81
[illegible]	[illegible]	107	[illegible]	[illegible]	1908	56.7	102	10	42.56
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1909	56.7	110	20	45.16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1910	55.0	109	24	36.86
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1911	56.9	113	19	38.94
[illegible]	[illegible]	[illegible]	16	[illegible]	1912	53.6	105	36	38.68
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1913	56.5	110	12	37.47
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1914	56.1	109	18	34.72
[illegible]	[illegible]	[illegible]	16	[illegible]	1915	54.8	102	24	49.62
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
[illegible]	[illegible]	[illegible]	17	[illegible]	Average 28 yrs	54.7	116	40	39.99

KILLING FROSTS.

Stations.	Last in Spring	First in Autumn	Days of growing season	Stations	Last in Spring	First in Autumn
Northeast Plain				*Ozark Plateau (continued)*		
Brunswick	April 4	Oct. 9	187	Cabool	[illegible]	Oct. [illegible]
Columbia	April 4	Oct. 9	187	[illegible]	April 11	Oct. 6
Fayette	April 3	Oct. 9	188	Hollister	[illegible]	Oct. 9
Fulton	April 4	Oct. 9	187	Houston	[illegible]	Oct. 6
Hannibal	April 3	Oct. 9	188	Ironton	April 6	Oct. 6
Jefferson City	April 4	Oct. 9	187	Koshkonong	[illegible]	Nov. 1[illegible]
Louisiana	April 11	Oct. 6	177	Lebanon	[illegible]	Oct. 9
Macon	April 4	Oct. 9	187	Lockwood	[illegible]	Oct. 9
Mexico	April 4	Oct. 9	187	Mountain Grove	April 4	Oct. 9
Oakfield	April 3	Oct. 9	188	Mount Vernon	[illegible]	Oct. 9
Palmyra	April 4	Oct. 9	187	Neosho	[illegible]	Oct. 9
St. Catherine	April 3	Oct. 9	188	Rolla	April 4	Oct. [illegible]
St. Charles	April 3	Oct. 9	188	Springfield	April 3	Nov. 12
St. Louis (1)	April 3	Oct. 9	188			
St. Louis (2)	April 3	Oct. 9	188	*Southwest Plain.*		
Steffenville	April 13	Oct. 9	[illegible]	Amoret	April 3	Oct. 9
Unionville	April 12	Oct. 9	179	Clinton	April 2	Oct. 9
Warrenton	April 5	Oct. 9	186	Harrisonville	April 3	Oct. 9
				Lamar	April 3	Nov. 12
				Lamonte	April 5	Oct. 9
Southeast Lowlands				Marshall	April 3	Oct. 9
Cardwell	April 4	Oct. 9	187	Nevada	April 3	Oct. 9
Caruthersville	April 4	Nov. 15	221	Warrensburg	April 3	Oct. 9
Doniphan	April 4	Oct. 9	187	Warsaw	April 3	Oct. 9
Jackson	April 4	Oct. 9	187			
Marble Hill	April 4	Oct. 9	187	*Northwest Plateau.*		
Poplar Bluff	March 31	Oct. 9	191	Avalon	April 3	Oct. 9
Sikeston	April 4	Oct. 9	187	Bethany	April 12	Oct. 5
Cairo, Ill.	April 3	Nov. 15	225	Conception	April 12	Oct. 9
				Grant City	April 12	Oct. 9
Ozark Plateau.				Kansas City	April 1	Nov. 11
Birchtree	April 3	Oct. 9	188	Kidder	April 3	Oct. 9
Bolivar	April 3	Oct. 9	188	Lexington	April 3	Oct. 9
Cassville	April 4	Oct. 6	184	Liberty	April 3	Oct. 9
Crocker	April 1	Oct. 9	190	Maryville	April 12	Oct. 5
Dean	April 3	Oct. 9	188	Oregon	April 3	Oct. 9
Duncan	April 4	......	....	St. Joseph	April 3	Oct. 9
Eldon	April 3	Oct. 6	185	Tarkio	April 3	Oct. 5
Fruit City	March 31	Oct. 9	191	Trenton	April 3	Oct. 9

Monthly and Annual Snowfall.

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	An
1890..	....	....	5.7	....	....	....	....	....	....	....	....	....	..
1891..	4.3	2.4	7.1	0.0	0.0	....	....	....	0.0	....	....	....	.
1892..	....	....	....	0.0	0.0	....	....	....	0.0	0.0	1.0	4.8	..
1893..	2.4	4.6	3.2	0.0	0.0	....	....	....	0.0	0.0	0.3	2.7	13
1894..	2.7	11.2	0.2	T.	0.0	....	....	....	0.0	T.	T.	1.3	15
1895..	**9.4**	3.3	4.4	T.	0.0	....	....	....	0.0	T.	3.2	3.4	23
1896..	3.1	4.1	5.2	0.0	0.0	....	....	....	0.0	0.0	0.2	T.	12
1897..	4.0	8.2	1.0	T.	0.0	....	....	....	0.0	0.0	T.	6.3	19
1898..	8.4	0.8	0.6	T.	0.0	....	....	....	0.0	1.6	2.3	5.1	18
1899..	4.0	5.3	8.9	**3.8**	0.0	....	....	....	0.0	0.0	0.2	6.6	28
1900..	0.2	**16.6**	0.3	0.7	0.0	....	....	....	0.0	0.0	0.2	9.6	18
1901..	0.8	7.6	3.2	1.8	0.0	....	....	....	0.0	0.0	0.3	6.9	20
1902..	6.9	5.3	0.9	0.1	0.0	....	....	....	0.0	0.0	0.4	3.1	16
1903..	5.0	5.8	1.1	1.2	0.0	....	....	....	0.0	0.0	1.1	2.2	16
1904..	7.4	1.5	1.3	2.7	0.0	....	....	....	0.0	0.0	T.	6.0	18
1905..	6.8	13.2	T.	0.3	0.0	....	....	....	0.0	0.3	T.	1.7	22
1906..	9.2	4.1	9.2	0.4	0.0	....	....	....	0.0	0.0	**5.0**	0.6	28
1907..	2.8	4.5	1.0	0.2	**0.8**	....	....	....	0.0	0.0	T.	3.7	13
1908..	3.6	4.1	0.7	T.	0.0	....	....	....	0.0	0.8	0.2	T.	9.
1909..	6.5	3.1	0.6	T	T.	....	....	....	0.0	0.0	0.4	7.7	18
1910..	3.5	7.7	0.3	1.1	T.	....	....	....	0.0	0.0	0.1	2.4	15.
1911..	0.7	6.3	1.7	T.	T	....	....	....	0.0	0.2	1.1	5.1	15.
1912..	6.5	11.9	**17.2**	0.7	0.0	....	....	....	**T.**	0.7	.01	0.6	**37**
1913..	2.6	8.5	5.0	T.	0.0	....	....	....	0.0	**3.3**	T.	6.6	26
1914..	1.0	14.0	4.7	T.	0.0	....	....	....	0.0	0.0	0.1	6.6	28
1915..	5.4	4.1	7.9	T.	0.0	....	....	....	0.0	0.0	0.1	**7.8**	25
Mean	4.6	7.0	3.1	0.4	0.0	....	....	....	0.0	0.3	0.6	3.4	19

Miscellaneous Snowfall Notes.

The mean seasonal snowfall for Missouri is 19.5 inches, and ranges from 2 inches at Maryville, Nodaway County, in the Northwest to 7.9 inches at New Madr New Madrid County, in the extreme Southeast.

The greatest seasonal snowfall on record was 73.5 inches at Oregon, Holt Count in 1898-99. The greatest monthly amount was 46.0 inches at Bethany, Harrison Count in January 1898; of this amount 35.0 inches fell from the 22d to the 25th, and 20 inch on the 25th. The record fall for March was 40.2 inches at Liberty, Clay County, in 19 of which 21.0 inches fell on the 23d and 24th. Snows in April are generally unimportant but heavy falls are on record. Prof. C. W. Pritchett, voluntary observer Glasgow, Howard County, has written the following interesting note regarding Ap snows: "On April 7, 1837 it snowed all day in St. Charles and Warren Counties, and, the level, snow lay two and one-half feet deep on the morning of the 8th. In A 1857, snow lay on the ground near Fayette from the 17th to the 20th to a depth of seve inches. On April 15, 1842 the ground was frozen so hard we could not set stakes guides for a worm fence." In 1901, 13.0 inches fell at Unionville, Putnam County, which 6.0 inches fell on the 15th.

Snow flurries have occurred several years in May but in 1907 occurred the on snowstorm on record. On May 3d of that year Fairport, De Kalb County, recorded inches, and on the 10th 6.0 inches fell at Gallatin, Daviess County. A flurry on May 15 1907 is the latest date in spring that snow has been known in the State.

There are two instances of flurries in September: September 27th, 1908 at Kan City, and September 29th, 1912 at St. Louis. Oregon, Holt County, recorded 15.0 inc in October 1908. Bethany, Harrison County, holds the record for November with inches in 1906. All previous December amounts were exceeded by the fall of 21.5 inc at St. Louis University in 1915.

O. R. R.

Climatological data for Year, 1915.

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind.
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
theast Plain																				
ville	Cooper	600	....	....	....	....	....	....	39	46.79	8.68	Aug.	0.95	Dec.	21.5	111	174	24	167	se.
swick	Chariton	652	28	53.1	92	May 13	−19	Jan. 29	36	55.65	10.22	July	0.71	Oct.	41.5	108	141	34	190	e.
mbia	Boone	784	26	54.1	93	July 30	−13	Jan. 28	26	43.65	9.11	June	1.15	March	30.7	121	97	110	158	se.
tte	Howard	725	31	52.1	91	May 13	−19	Jan. 28	33	47.52	9.42	Sept.	1.18	Oct.	38.1	....	....	....	....	.....
on	Callaway	818	16	54.0	93	May 13†	−20	Jan. 24	24	45.36	9.96	June	1.07	March	25.6	122	141[n]	53[n]	157[n]	s.
n.	Scotland	700	....	....	....	....	....	....	29	47.47	8.27	June	0.76	Dec.	13.2	99	93	100	172	se.
nibal	Marion	534	24	53.0	92	May 13	−16	Jan. 24	24	48.61	9.00	July	0.58	Oct.	38.9	129	127	100	138	sw.
mann	Gasconade	482	....	....	....	....	....	....	42	43.74	9.09	June	0.48	March	27.0	127	124	74	167	e.
rson City	Cole	628	29	55.2	94	July 28	− 9	Jan. 28	33	36.61	5.83	May	0.86	March	31.7	114	208	9	148	w.
esville	Chariton	660	....	....	....	....	....	....	3	56.44	9.34	Sept.	0.62	Oct.	34.2	84	....	....	....	.....
siana	Pike	500	22	53.8	94	July 28	−24	Jan. 21	38	49 56	8.41	May	0.90	March	42.7	116	193	79	93	se.
on	Macon	881	18	52.0	92	May 13	−18	Jan. 28†	18	49.94	10 97	July	1.20	Oct.	32.0	103	131	99	134	sw.
ico	Audrain	797	27	53.0	94	May 13†	−16	Jan. 28†	38	49.13	8.01	June	0.87	Oct.	47.7	135	155	30	180	nw.
end‡‡	Franklin	793	24	55.6	94	July 11†	−11	Jan. 28	24	53.20	13.21	Aug.	0.42	March	27.7	101	98	157	110	s.
yra	Marion	652	4	51.6	93	May 14	−18	Jan. 24†	4	50.65	8.28	June	0.38	Oct.	27.2	100	111[a]	117[a]	136[a]	sw.
atherine	Linn	914	2	51.9	91	May 13	−20	Jan. 28	2	45.93	11.99	July	0.67	Oct.	30.2	117	108	194	63	ne.
harles	St. Charles	614	29	55.4	99	July 26	−12	Jan. 28	38	49.32	10 93	Aug.	0.67	Oct.	21.2	91	134	94	137	s.
ouis (1)	St. Louis City	717	43	56.3	94	July 15	− 4	Jan. 28	45	49.28	11.43	Aug.	0.44	March	28.2	116	130	123	112	s.
ouis (2)	......do	578	4	55.5	94	July 14	− 5	Jan. 25	4	53.97	13.01	Aug.	0.49	March	44.9	116	148	115	102	se.
enville	Lewis	576	18	53.9	97	May 12	−21	Jan. 28	23	56.71	11.84	July	0.75	Oct.	36.5	99	128	146	91	w.
nville	Putnam	1,072	23	49.8	92	May 13	−23	Jan. 28	23	45 29	10.29	June	0.66	Oct.	41.5	97	139	66	160	s.
alia	Audrain	796	....	....	....	....	....	....	5	38.46	7.96	June	0.56	March	25.0	56	....	....	....	.....
erton	Warren	865	33	53.6	94	July 28	−12	Jan. 29	26	47.60	10.18	May	0.64	March	28.5	116	113	94	158	s.
theast Lowlands																				
thersville	Pemiscott	220	20	6.11	99	July 30†	14	Jan. 24	25	51 84	10.79	Aug.	0.93	April	2.0	82	232	48	85	e.
iphan	Ripley	440	12	57.6	101	July 30	10	Jan. 24†	12	52.37	13.98	Aug.	1.57	March	6.1	82	193[a]	53[a]	118[a]	sw.
son	Cape Girardeau	458	26	5.85	99	July 29†	6	Jan. 28	25	47.74	9.15	Aug.	0 77	March	9.7	89	119	103	143	s.
le Hill	Bollinger	420	25	57.4	100	July 29	6	Jan. 28	25	49.16	10.33	Aug.	0.52	March	4.0	....	175[m]	120[m]	57[m]	s.
Madrid	New Madrid	285	....	....	....	....	....	....	22	53.80	12.48	Aug.	1.19	April	. ..	110	181	32	152	se.
on (near)	Bollinger	430	....	....	....	....	....	....	2	51.82	12 05	Aug.	0.71	March	5.5	69	185	0	180	s.
ar Bluff	Butler	333	13	57.9	99	July 31	11	Jan. 23†	13	61.00	14.58	Aug.	1.57	March	9.0	91	199	33	133	.....
ston	Scott	328	16	59.4	102	July 30	10	Jan. 19	16	45.27	12.71	Aug.	0.57	June	3 5	92	156	129	80	sw.
o, Ill.	Alexander, Ill	359	44	58.6	97	July 30	10	Jan. 21	44	46.00	10.28	Aug.	0 75	March	6.2	94	123	113	129	s.
rk Plateau																				
gton	Phelps	695	....	....	....	....	....	....	13	36.15	9.94	Aug.	0.46	March	22.5	95	191	25	149	s.
ntree	Shannon	1,200	23	56.1	97	July 29†	5	Jan. 23†	23	51.10	14.92	Aug.	0.99	July	8.5	72	229[a]	53[a]	82[a]	s.
var	Polk	1,020	29	56.2	98	July 30	0	Jan. 28	29	53.28	11.16	Sept.	0.78	March	33.5	81	201	101	63	sw.
ville	Barry	1,500	5	54.8	94	July 28†	5	Jan. 24†	5	48.98	11.23	Aug.	0.98	July	10.0	69	230	54	81	s.
ker	Pulaski	1,300	5	55.7	95	July 30†	− 4	Jan. 28	5	......	9.84	Aug.	0 35	March	20.7	....	230	74	61	n.
a	McDonald	1,060	17	....	95	July 30	4	Jan. 25†	17	......	10.81	May	1.97	Oct.	6.7	....	202*	29*	105*	sw.
on	Miller	934	4	55.0	95	July 30	−10	Jan. 28	4	40.69	8.08	June	0 86	March	37.5	107	130[a]	188[a]	46[a]	s.
t City	Reynolds	1,150	3	57.3	93	May 13†	11	Jan. 25	3	53.48	14 10	Aug.	0.85	March	6.0	78	221	82	62	s.
o	Dent	1,250	13	55.6	97	July 30	− 3	Jan. 28	13	49 72	13.67	Aug.	0.98	March	18.1	94	175	83	105	s.
lland	Iron	1,000	11	....	96	July 31	− 1	Jan. 24†	11	43 46	12.15	Aug.	0.72	March	5.0	56	184	86	95	s.
ister	Taney	1,000	7	58.4	102	July 29	6	Jan. 23	7	47.12	9.54	Aug.	1.21	July	11 5	72	251	0	114	sw.
ston	Texas	1,280	24	55.8	96	July 30	3	Jan. 28	24	42.70	10.61	Aug.	0.58	July	11.4	78	198[a]	68[a]	98[a]	nw.
ton	Iron	925	36	55.3	95	July 30†	2	Jan. 28	38	54.49	14.69	Aug.	0 98	March	12.5	100	101	135	129	n.
konong	Oregon	911	15	....	98	July 30	8	Jan. 28	15	53.18	15 14	Aug.	1 37	Sept.	12 2	94	159[j]	79[j]	117[j]	sw.
anon	Laclede	1,265	27	56.5	97	July 29	4	Jan. 22	27	46.79	9.40	Aug.	0 55	March	12.5	107	163	84	118	sw.
kwood	Dade	1,088	10	55.8	93	July 18†	2	Jan. 28	22	64 62	12.24	Sept.	1.75	Oct.	24 0	91	172[a]	81[a]	111[a]	sw.
ntain Grove	Wright	1,490	15	54.7	96	July 30	4	Jan. 23†	17	49.90	14.89	Aug.	1.19	Oct.	15.5	93	115[i]	85[i]	126[i]	s.
nt Vernon	Lawrence	1,480	22	....	97	July 30	5	Jan. 23	37	......	....	....	....	......	....	....	....	....	....	sw.
sho	Newton	1,083	30	57 0	93	July 13†	6	Jan. 23	33	55.04	9.06	Aug.	1.75	Jan.	12.7	109	....	....	....	sw.
a	Phelps	1,139	16	54.8	98	Sept. 14	− 4	Jan. 28	35	46 11	12.29	Aug.	0.79	Oct.	24.3	102	170	116	79	s.
ngfield	Greene	1,350	28	55.4	92	July 30	3	Jan. 23	28	46.47	10.81	Aug.	1.82	July	28.4	122	192	93	80	se.
thwest Plain																				
ret	Bates	850	7	56.0	95	July 18	−13	Jan. 28	7	54.65	8.59	Aug.	0.15	Oct.	31.0	107	136	84	145	sw.
ton	Henry	800	9	55.8	95	July 30	−10	Jan. 28	30	55.50	9.25	June	1.16	Oct.	34.0	76	138	136	91	se.
risonville	Cass	912	39	53.5	97	May 15	−13	Jan. 28	44	51.93	9.71	Sept.	0 55	Dec.	33.0	107	113	41	211	sw.
ar	Barton	964	29	56.0	95	July 18	1	Jan. 28	35	58.39	12.88	June	1.29	April	17.5	105	158	59	148	se.
onte	Pettis	863	8	54.2	93	July 27†	−23	Jan. 28	27	41.81	6.91	May	1.67	Oct.	46.5	92	131	159	75	sw.
shall	Saline	779	25	53.5	93	May 13	−16	Jan. 28	25	52.20	9.53	Sept.	0 41	Oct.	36 8	102	187[c]	79[c]	96[c]	sw.
ada	Vernon	860	....	....	....	....	....	....	22	47.39	8.23	May	1.45	March	36.5	96	....	....	....	sw.
rensburg	Johnson	883	33	55.4	96	July 30	−14	Jan. 28	37	53.38	11.68	May	1 15	Oct.	50.0	118	132	127	106	sw.
saw	Benton	883	12	56.0	97	July 18†	−14	Jan. 28	12	58.29	9.53	May	2.03	March	51.5	119	134	167	64	sw.
rthwest Plateau																				
lon	Livingston	730	19	54.6	93	May 12†	−18	Jan. 28	31	60.46	13.09	May	0.80	Oct.	46.0	82	193	93	79	sw.
any	Harrison	881	26	51.7	94	May 13	−23	Jan 28	26	39.73	10.28	July	0 21	Oct.	26.0	87	118	116	130	nw.
eption	Nodaway	982	27	51.1	92	May 13†	−20	Jan. 28	31	44.33	14.42	July	0.65	Oct.	20.5	98	88	172	105	nw.
t City	Worth	1,130	14	51.5	97	May 13	−19	Jan. 28	24	47.41	12.59	July	0.45	Dec.	17.5	91	190[a]	48[a]	126[a]	nw.
sas City	Jackson	963	27	54.8	90	May 13	−10	Jan. 28	27	47.20	11.00	May	0.35	Oct.	30 7	126	126	120	119	s.
ler	Caldwell	1 017	25	52.8	91	May 13†	−15	Jan. 24	25	50.76	10 55	July	0 20	Oct.	41.2	102	155	91	119	sw.
ngton	Lafayette	813	30	54.3	93	May 13	−14	Jan. 28	34	58.96	15 98	May	0.69	Oct.	34.2	106	163	16	186	s.
rty	Clay	864	26	54.6	94	May 12†	−13	Jan. 28	27	51.87	11.55	May	0 10	Oct.	27 0	103	148[e]	141[e]	71[e]	sw.
ville	Nodaway	1.160	22	50.7	96	Apr. 28†	−18	Jan. 28†	25	57.16	20.22	July	0.72	Dec.	40.0	118	193	22	150	s.
on	Holt	1.113	60	51.8	90	May 14	−16	Jan. 28	60	46.00	10.88	July	0 76	March	39.1	94	130	135	160	nw.
oseph	Buchanan	967	8	53 3	93	May 14	−12	Jan. 28	45	45 51	12.92	July	0.33	Oct.	29.1	127	115	128	122	nw.
io	Atchison	1,150	5	51.5	94	May 11	−22	Jan. 28	5	47.80	14.50	July	0 68	Oct.	29 5	102	165	84	116	nw.
ton	Grundy	812	21	52.8	90	May 13†	−16	Jan. 28	21	49. 12	10 96	May	0.51	Oct.	22.1	109	143	77	115	s.
e means and extremes			....	54.8	102‡	July 29†	−24‖	Jan. 24	....	49.62	20.22§	July	0 10¶	Oct.	25.5	100	157	88	120	s.

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† Also on other dates. ‡ At Hollister July 29 and Sikeston July 30. ‖ At Louisiana. § At Maryville. ¶ At Liberty. * 29 days missing. a, b, c, indicate the number ys missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Precipitation for the Year 1915, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain																										
Boonville	1.52	−0.48	2.69	0.03	1.06	2.08	2.79	1.21	8.29	2.82	6.11	0.46	3.07	1.29	8.68	5.28	6.30	1.96	1.73	1.44	3.70	1.27	0.95	1.13	[illegible]	[illegible]
Brunswick	2.69	+0.98	3.41	1.48	1.77	0.66	2.49	0.71	8.35	3.38	9.77	4.08	10.22	5.62	5.35	1.33	7.65	3.06	0.71	2.15	2.29	0.26	1.52	[illegible]	[illegible]	16.47
Columbia	2.10	−0.13	2.11	0.01	1.15	1.88	2.04	1.66	6.32	+1.16	9.11	1.73	3.55	0.10	1.29	1.25	6.85	1.04	1.37	1.65	3.02	0.71	1.67	[illegible]	[illegible]	[illegible]
Fayette	3.15	+1.12	2.82	+0.72	2.10	−0.58	2.11	1.34	5.90	+1.21	6.72	2.04	1.63	−0.73	4.71	+1.81	9.42	4.77	1.18	1.25	3.29	1.11	1.55	[illegible]	[illegible]	[illegible]
Fulton	2.64	+0.05	2.20	+0.06	1.07	1.83	2.70	−1.48	5.92	+1.21	9.96	+5.07	2.91	1.76	5.92	+2.62	6.57	2.25	1.28	1.18	3.19	0.90	1.20	[illegible]	[illegible]	[illegible]
Gorin	2.16	+0.47	2.04	+0.38	1.01	1.55	1.04	−3.03	8.10	+3.61	8.27	1.61	6.01	1.42	6.80	3.90	5.81	−1.56	1.93	0.55	3.54	1.54	0.70	[illegible]	[illegible]	[illegible]
Hannibal	2.58	+0.38	1.94	+0.31	0.75	−2.01	2.06	1.19	5.77	0.77	8.93	+5.41	9.06	5.25	1.49	−1.11	7.16	3.60	0.58	1.06	3.11	1.16	2.24	[illegible]	[illegible]	[illegible]
Hermann	1.99	−0.26	1.28	1.18	0.48	−1.64	4.27	+0.17	8.04	+3.73	9.09	1.51	2.84	1.18	8.11	+5.45	1.94	2.13	0.53	2.11	[illegible]	[illegible]	1.51	[illegible]	[illegible]	[illegible]
Jefferson City	2.16	−0.12	2.56	+0.32	0.86	−2.25	1.52	2.07	5.83	+1.44	5.67	1.39	2.05	1.68	5.03	2.91	3.18	0.06	1.57	0.72	3.29	1.04	[illegible]	[illegible]	[illegible]	[illegible]
Keytesville	1.89	......	3.71	......	1.21	......	3.32	......	7.21	......	7.72	......	7.47	......	8.06		9.31		0.62		3.27		2.02	..	[illegible]	......
Louisiana	2.45	−0.39	1.81	−0.68	0.90	1.69	2.56	0.45	8.41	3.94	7.15	2.96	7.69	1.16	6.71	2.80	4.76	[illegible]	1.62	[illegible]	3.85	1.61	[illegible]	[illegible]	[illegible]	[illegible]
Macon	2.22	+0.78	2.52	+0.37	1.34	1.33	1.36	1.43	8.87	+4.95	7.72	+2.80	10.97	+7.70	1.78	1.12	[illegible]	[illegible]	1.20	1.85	4.21	2.41	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	2.30	+0.19	2.26	−0.24	1.00	−1.65	2.20	1.29	6.58	+1.79	8.01	2.67	4.73	0.68	6.09	3.36	7.56	[illegible]	0.87	1.35	3.42	[illegible]	4.11	[illegible]	[illegible]	[illegible]
Oakfield*†	2.53	+0.14	1.96	−0.62	0.42	3.28	1.95	2.25	9.60	+3.60	8.97	+1.34	6.42	+1.60	13.21	+9.97	0.71	3.28	0.97	1.63	4.65	1.92	2.31	0.31	[illegible]	[illegible]
Palmyra	3.10	−0.79	1.86	−0.38	1.18	−1.74	2.27	−1.33	7.09	+2.44	8.28	+3.96	7.63	+3.95	5.47	2.27	6.89	+3.27	[illegible]	−1.60	2.79	0.46	[illegible]	[illegible]	[illegible]	[illegible]
St. Catherine	1.98	......	2.14	......	1.62	......	1.54	......	9.11	.....	4.42	......	11.99	.....	3.57	.	6.29	......	0.67	.	1.70	.....	0.98		[illegible]	.....
St. Charles	2.48	+0.15	1.50	1.48	1.10	1.15	1.64	−1.76	8.52	4.19	7.92	3.72	7.97	4.43	10.93	+7.98	1.50	1.21	0.67	1.75	2.96	0.11	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	2.83	+0.56	2.30	−0.45	0.44	2.99	1.20	2.32	7.67	3.43	9.77	5.30	6.02	+2.59	11.43	8.77	1.41	−1.50	0.90	−1.51	1.97	0.91	3.34	1.11	[illegible]	[illegible]
St. Louis (2)	3.13	......	2.59	......	0.49	......	1.21	....	9.06	......	9.37	......	5.91	......	13.04	.....	1.17	...	0.87	....	2.51	.	[illegible]	.	[illegible]	......
Steffenville	2.54	+0.22	2.62	+0.58	1.47	−1.15	2.47	1.16	6.04	+0.76	9.63	+5.74	11.84	6.75	6.26	+2.79	7.79	+3.34	0.75	−1.55	3.60	1.75	1.70	[illegible]	[illegible]	[illegible]
Unionville	2.65	+0.59	3.22	+1.23	2.12	−0.16	1.43	−2.23	9.18	+3.33	10.29	+6.11	6.85	2.47	2.30	1.72	4.32	0.32	0.66	−1.54	1.47	−0.35	[illegible]	[illegible]	[illegible]	[illegible]
Vandalia	2.19	......	1.74	......	0.56	.....	2.15	......	6.01	......	7.96	......	5.14	......	2.25	...	4.90	....	0.88	.....	3.18	..	1.50		[illegible]	......
Warrenton	1.96	−0.65	2.14	−0.40	0.64	−2.76	2.42	1.47	10.18	+5.27	8.17	+3.64	5.96	1.95	7.26	+1.52	3.23	−0.62	0.84	−1.75	2.78	+0.05	2.09	[illegible]	[illegible]	7.62
Southeast Lowlands																										
Cape Girardeau	3.70	−0.34	4.20	+1.84	1.05	−2.47	1.15	2.92	5.45	+1.80	2.25	−1.16	5.80	.....	7.40	......	....	......	..	......	....	....	7.96	......	...	......
Cardwell	4.76	......	2.39	......	2.34	......	2.02	......	5.14	......	2.43	......	2.90	......	10.28	.....	1.39	......	2.50	.....	4.06	......	....	....	....	......
Caruthersville	5.81	+1.83	2.92	−1.27	1.93	−2.01	0.93	−2.94	6.15	+2.03	3.27	−0.69	3.45	0.25	10.79	+7.79	1.28	1.96	1.61	−1.00	4.32	−0.13	9.38	+5.16	51.84	+6.62
Doniphan	3.98	+0.01	4.64	+0.84	1.57	−2.35	3.25	−2.13	4.81	+1.04	3.16	−1.06	2.55	3.45	13.98	*10.23	2.30	1.47	1.61	1.38	3.80	0.96	6.66	+3.85	52.37	5.00
Jackson	5.23	+1.60	2.89	−0.43	0.77	−4.05	0.99	−3.55	7.47	+3.19	3.71	−0.53	3.82	+0.05	9.15	+6.09	2.76	−0.83	1.02	−1.93	2.76	0.73	7.17	3.89	47.74	−2.77
Marble Hill	4.10	+0.86	3.67	0.00	0.52	−4.25	1.60	−3.04	8.82	+4.44	2.69	1.63	3.92	0.98	10.33	[illegible]	3.43	−0.26	1.11	−1.28	3.02	0.19	5.95	2.79	49.16	3.84
New Madrid	4.82	−0.42	3.83	−0.38	2.20	−3.52	1.19	−3.18	6.92	+2.66	2.13	−1.97	2.68	1.67	12.48	+9.61	3.70	+0.37	1.47	−1.87	4.31	−0.12	8.67	3.85	53.80	2.94
Patton (near)	4.38	......	3.00	.....	0.71	......	0.90	......	7.45	......	3.62	......	5.30	......	12.05		3.30	......	1.35	.....	3.12	....	6.64	....	51.82	......
Poplar Bluff	4.48	+0.92	3.74	+0.08	1.57	−3.80	2.56	−1.87	7.60	+2.61	3.69	−1.63	4.81	+1.06	14.58	*11.41	3.12	−0.05	2.14	−0.69	4.00	−0.52	8.71	[illegible]	[illegible]	13.55
Sikeston	4.17	0.36	3.06	−0.57	1.31	−4.11	1.35	−2.88	3.04	−1.72	0.57	−3.81	3.55	0.80	12.71	+9.34	4.81	1.38	1.14	1.52	2.43	1.41	7.15	+3.31	45.27	2.89
Cairo, Ill.	4.85	+1.03	2.90	−0.43	0.75	−3.27	1.01	−2.56	4.13	+0.30	2.42	1.89	3.51	+0.06	10.28	7.35	4.16	+1.69	1.20	−1.43	4.18	+0.16	6.61	3.28	[illegible]	4.29
Ozark Plateau																										
Arlington	1.78	−0.24	1.64	−1.27	0.46	−1.48	1.61	−2.11	6.61	+2.29	4.31	+0.80	4.11	+0.75	9.94	6.13	1.60	−2.10	0.73	−1.49	1.26	−1.47	2.07	0.51	36.15	−0.32
Bagnell	....	......	2.13	......	1.01	−2.05	1.70	−2.10	5.35	+0.78	6.62	+1.72	4.48	−0.02	7.35	−0.98	3.39	......	....	......	....	....	....	....	....	......
Belle	3.38	+1.15	4.00	+1.37	....	......	4.05	−0.03	....	....	....	......	....	....	....	....	....	......	...	......	....	......	....	....	....	......
Birchtree	4.27	+1.55	3.72	+0.83	1.66	−3.24	1.97	−2.72	6.18	+2.04	6.14	+1.52	0.99	3.86	14.92	*10.95	2.22	−1.25	1.27	−1.28	4.20	+1.37	3.56	1.06	51.10	+7.03
Bolivar	2.00	0.00	2.89	+0.95	0.78	−2.23	2.41	−1.43	7.36	+1.95	5.96	+0.40	2.83	−1.07	9.50	+5.84	11.16	+7.69	2.26	−0.47	2.92	−0.18	3.21	−0.74	53.28	12.55
Cassville	4.04	......	3.42	.....	2.47	......	2.85	......	5.74	.....	5.75	......	0.98	......	11.23	.....	5.15	......	1.11	.....	2.73	......	3.51	......	48.98	......
Crocker	....	......	1.74	......	0.35	......	2.92	......	6.66	...	6.66	......	6.73	......	9.84	......	2.72	......	1.30	......	3.68	.....	1.50	....	...	......
Dean	2.35	+0.50	4.64	+2.66	2.65	−0.92	....	......	10.81	+4.79	7.77	+2.18	2.88	−1.49	7.47	+3.64	5.57	+2.29	1.97	−1.05	2.74	0.16	3.19	+1.13	....	......
Duncan	3.08	......	3.75	......	2.38	......	4.21	......	...	......	....	......	....	....	....	....	....	......	..	......	....	......	....	....	....	......
Eldon	2.02	−0.06	2.58	−0.24	0.86	−2.81	2.42	−2.31	5.97	+1.29	8.68	+3.27	2.71	−1.53	5.81	−1.86	3.09	−0.70	1.85	−0.91	3.04	−0.74	2.26	−0.07	40.69	−1.47
Fruit City	4.34	......	4.26	......	0.85	......	1.77	......	7.16	......	5.63	......	3.37	......	14.10	...	2.09	......	1.43	.....	3.68	......	4.80	.....	52.48	......
Gano	3.39	+0.47	2.72	0.10	0.98	−3.07	2.02	−3.07	7.64	+3.63	7.23	+2.88	2.57	−1.83	13.67	*10.04	1.74	−3.16	1.37	−2.37	3.09	+0.85	3.30	1.44	49.72	5.75
Goodland	3.23	+0.21	3.16	+0.06	0.72	−3.40	1.31	−4.80	6.97	+3.51	4.45	+0.92	2.18	−2.75	12.15	+9.17	0.92	−4.14	1.97	−1.85	4.29	+2.00	2.11	−0.67	43.46	−1.14
Hollister	1.75	−0.85	4.50	+1.08	3.66	−0.46	2.35	−1.39	6.30	+1.18	8.16	+4.09	1.21	3.52	9.54	+5.29	2.15	−1.94	3.05	−0.06	1.85	−1.53	2.66	−0.37	47.12	1.52
Houston	2.19	+0.31	3.03	+0.55	1.82	−2.84	2.90	−1.86	5.36	+0.91	5.41	+0.40	0.58	−4.18	10.61	+7.07	2.79	−1.20	1.01	−1.46	3.59	1.05	3.11	−0.99	42.70	−0.26
Ironton	4.54	+1.53	3.35	−0.12	0.98	−3.42	1.42	−2.96	7.55	+2.62	5.51	+0.43	4.61	+0.04	14.69	*11.26	2.93	−0.56	1.20	−1.47	3.65	0.52	4.06	−1.05	54.49	+8.08
Koshkonong	3.71	+0.51	4.40	+1.23	2.14	−1.96	2.13	−2.91	6.73	+2.36	3.97	−0.16	2.16	−2.16	15.14	*11.41	1.37	−2.26	1.64	−1.07	5.25	+2.26	4.54	1.84	53.18	+8.67
Lebanon	2.73	+0.24	3.76	+1.62	0.55	−3.31	2.83	−1.78	6.21	+0.13	5.46	−0.05	3.92	−0.76	9.40	+6.20	4.32	+0.49	2.60	−0.03	2.47	−0.07	2.54	−0.22	46.79	+2.46
Lockwood	2.33	+0.89	3.93	+1.72	3.67	+1.38	2.29	−1.17	9.72	+5.21	10.20	+5.76	3.86	−1.73	8.56	+4.49	12.24	+8.60	1.75	−1.28	2.66	+0.62	3.41	−1.45	64.62	+25.94
Mountain Grove	2.46	0.08	2.52	−0.12	2.58	−1.66	3.02	1.40	4.48	+0.39	7.61	−3.31	2.26	−2.25	14.89	*11.03	2.60	−1.57	1.19	−1.69	4.36	+2.24	1.93	−0.31	49.90	+7.89
Mount Vernon	3.08	+0.88	3.56	+0.72	3.46	−0.23	2.88	−0.58	8.68	+2.96	5.08	0.24	5.79	+0.40	7.96	+3.86	6.85	+3.33	3.01	−0.31	....	.....	3.48	[illegible]	....	......
Neosho	1.75	−0.61	3.47	+0.95	3.50	+0.06	3.99	−0.24	9.62	+3.45	6.74	+1.21	2.90	−1.52	9.06	+4.98	7.05	+2.96	1.88	−1.30	2.15	−0.88	2.93	−0.29	55.04	+9.35
Rolla	2.50	+0.19	2.76	+0.32	1.14	−2.38	2.37	−2.00	7.25	+2.15	4.29	0.00	5.58	+1.44	12.29	+8.57	2.68	−1.12	0.79	−1.65	2.70	−0.16	1.76	−0.63	46.11	+5.05
Springfield	2.35	−0.31	2.66	+0.39	2.23	−1.84	2.78	−1.08	6.52	+0.97	5.81	+0.62	1.82	−2.97	10.81	+6.50	3.06	0.70	2.56	−0.24	2.66	0.02	3.21	+0.54	46.47	+1.90
Wheatland	2.42	0.55	2.77	+0.76	1.70	−1.72	....	......	....	......	....	......	..	.....	....	......	....	......	....	......	....	......	....	......	....	......
Southwest Plain																										
Amoret	2.66	...	3.24	......	1.69	......	2.67	.....	8.15	......	8.21	......	6.04	.....	8.59	......	8.21	......	0.15	......	1.54	.....	3.20	......	54.65	......
Appleton City	....	....	....	.....	..	....	....	.....	...	....	....	.....	....	.....	....	....	....	....	1.10	−1.15	2.95	−0.61	....	......	...	......
Clinton	2.95	+0.91	4.80	+2.84	2.20	−0.37	2.95	−1.26	8.50	+2.84	9.25	+4.29	5.88	+1.29	5.19	+1.84	6.62	+3.21	1.16	1.21	3.15	+1.22	2.85	+0.99	55.50	+16.59
Harrisonville	2.12	0.57	3.59	+1.42	1.65	0.89	2.76	−0.77	7.89	+3.19	6.50	+1.87	6.67	+2.77	6.69	+2.66	9.71	+5.43	0.80	−1.78	3.00	+1.03	0.55	−1.36	51.93	+14.14
Lamar	1.90	+0.20	3.60	1.25	2.22	0.62	1.29	−2.82	6.72	+1.02	12.88	+7.98	3.35	−1.11	7.79	3.66	11.54	+7.41	1.97	−1.04	2.68	+0.54	2.15	+0.43	58.59	+16.90
Lamonte	2.55	0.75	3.84	1.82	1.25	1.21	2.35	1.28	6.91	+1.46	4.53	−0.27	4.93	+0.22	3.28	−0.20	6.88	+2.63	1.07	−1.03	2.95	+1.01	1.27	−0.57	41.81	−3.33
Marshall	1.96	0.15	3.26	+1.30	1.70	0.88	2.90	−0.86	8.93	+3.93	6.41	+1.71	6.29	+1.86	5.38	+1.74	9.53	+5.12	0.41	−2.02	2.80	+0.72	2.63	−0.84	52.20	+13.41
Nevada	2.96	1.38	3.26	+1.08	1.45	1.62	1.50	2.30	8.23	+2.55	7.46	+2.14	4.45	0.57	3.90	+0.31	7.26	+3.01	2.22	−0.39	2.09	−0.16	2.61	+0.59	47.39	+7.48
Osceola	..	...	....	....	....	......	1.75	−2.13	8.32	+2.40	6.23	+1.67	5.11	+0.61	5.13	+2.32	9.65	+5.82	....	.....	....	.....	....	....	...	......
Warrensburg	2.67	0.88	4.84	2.75	2.42	+0.03	2.28	−0.67	11.68	+6.78	6.32	1.34	6.17	1.93	3.35	−0.17	8.67	+5.49	1.15	−1.40	2.15	+0.40	1.68	−0.18	53.38	+17.18
Warsaw	3.04	+0.78	4.91	1.96	2.03	−1.01	2.21	2.12	9.53	+1.62	7.54	+2.28	4.95	+0.10	8.54	+4.29	6.85	+2.22	2.09	−1.53	3.86	+1.44	2.68	−0.72	58.29	+13.75
Waverly		....	2.76	......	2.31	....	2.23	.....	8.90	......	8.87	......	8.14	......	3.29	......	7.71	......	0.42	......	1.97	......	1.51	......	...	......
Northwest Plateau																										
Albany	3.16	1.31	3.25	1.07	1.40	1.28	1.87	1.99	13.09	8.12	9.69	+4.96	10.07	+5.59	7.30	+3.33	6.88	+1.30	0.80	−2.79	1.75	−0.38	1.10	−0.73	60.46	+18.51
Bethany	2.00	0.52	2.75	1.37	1.23	−1.08	1.30	1.75	9.01	+3.88	3.17	−1.12	10.28	+5.58	4.09	−0.08	4.36	+0.72	0.21	−2.22	0.98	−0.61	0.35	1.21	39.73	+4.00
Chillicothe		.	3.36	+0.84	1.28	1.51	1.44	3.83	11.79	+1.95	4.82	−1.96	11.32	+6.17	3.38	−1.47	7.40	+0.92	0.42	−3.81	1.15	−1.29	0.73	−1.20	...	......
Conception	1.79	+0.77	2.23	0.99	0.73	0.99	1.60	−1.15	7.54	+3.01	5.02	+0.58	14.12	*10.38	3.04	−0.67	5.69	+2.04	0.65	−1.94	0.87	−0.40	0.75	0.40	44.33	+12.22
Grant City	2.63	1.07	2.60	1.37	0.82	1.26	2.09	0.86	7.08	+2.10	6.88	+2.62	12.59	+7.57	3.79	−0.07	6.91	+3.12	1.01	−1.78	1.16	−0.25	0.45	−0.79	47.41	+12.48
Kansas City	2.53	1.40	2.87	1.28	1.24	1.58	2.33	0.96	11.00	+5.89	7.88	+3.22	6.67	+1.83	4.46	0.29	5.88	+2.12	0.35	−1.86	0.87	−0.98	1.12	−0.24	47.29	9.83
[illegible]	2.22	0.87	3.71	2.15	1.20	1.13	1.72	1.36	10.48	4.60	4.60	+0.15	10.55	6.30	5.49	+1.45	8.50	+4.60	0.20	−2.52	1.10	−0.61	0.96	−0.51	50.76	13.99
Lexington	2.58	1.61	3.60	1.50	1.31	0.80	1.71	1.54	15.98	*10.93	7.93	+2.86	10.92	+5.82	2.97	−0.27	8.58	+4.12	0.69	−1.89	1.24	−0.69	1.39	−0.48	58.96	20.57
[illegible]	2.18	0.77	3.68	2.04	1.37	0.99	2.02	1.16	11.55	+6.09	8.16	+2.95	9.62	+1.88	2.20	2.06	8.56	+4.83	0.10	−2.09	1.10	−0.62	1.33	−0.09	51.87	+11.55
[illegible]	[illegible]	1.64	3.81	+2.58	1.80	0.14	1.48	1.70	7.89	+2.59	1.62	−0.39	20.22	*14.66	1.78	+0.32	6.97	+3.41	0.97	−1.14	1.08	−0.34	0.72	−0.47	57.16	+20.72
Oregon	1.79	0.10	3.26	+1.57	0.76	1.33	1.15	1.93	8.88	+4.04	6.72	+1.82	10.88	+6.33	2.73	−1.57	6.31	+2.84	0.93	−1.67	1.16	−0.47	1.22	−0.30	46.00	+9.49
St. Joseph	2.07	1.00	2.63	[illegible]	1.36	0.65	2.05	1.08	[illegible]	3.91	5.77	+0.68	12.92	+8.94	3.12	−0.73	1.30	+1.22	0.33	−2.26	0.82	−1.01	1.86	+0.83	45.51	+14.56
Tarkio	1.48		[illegible]		1.29	.	1.34		7.98	....	6.69	.....	11.50	.....	4.66	....	6.06	.....	0.68	......	1.75	.....	0.61	.....	47.80	......
Trenton	2.37	1.19	2.70	1.11	1.19	1.08	0.90	2.01	10.96	+5.89	5.64	+1.80	10.15	+6.33	4.10	+0.60	7.11	+2.95	0.51	−2.13	1.91	+0.28	1.36	−0.20	49.12	+14.60

*[illegible]

Monthly and Annual Mean Temperatures for the Year 1915, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain.																										
runswick	24.4	− 4.1	37.5	+ 9.1	34.8	− 6.9	61.3	+ 7.0	61.2	− 1.5	68.8	− 4.4	72.8	− 4.1	68.5	− 6.8	69.6	+ 1.4	59.0	+ 2.5	47.2	+ 5.5	32.2	+ 0.2	53.1	− 0.2
olumbia	27.2	0.0	39.4	+ 9.3	35.2	− 6.2	62.0	+ 7.7	62.6	− 1.9	69.6	− 4.9	74.1	− 3.3	68.2	− 6.5	70.2	+ 2.4	58.8	+ 4.0	48.9	+ 6.5	33.3	+ 0.4	54.1	+ 0.6
ayette	23.6	− 4.3	37.2	+ 8.1	32.9	− 9.6	60.8	+ 5.7	60.5	− 3.7	67.8[c]	− 5.4	71.4[b]	− 5.8	67.8	− 8.2	68.4	− 0.4	57.9	+ 0.9	46.3	+ 3.5	30.2	2.1	52.1	1.8
ulton	28.3	− 2.8	40.2	+10.6	36.0	− 9.0	61.0	+ 6.9	63.3	− 1.6	69.6	− 3.1	73.6	− 3.4	68.8	− 8.2	66.0[m]	3.2	58.8	+ 1.1	48.6	+ 3.4	33.2	+ 0.5	51.0	0.7
Hannibal	24.8	− 1.9	37.8	+ 8.7	35.2	− 6.4	61.0	+ 7.4	60.6	− 3.8	69.4	− 3.9	73.4	− 4.0	68.1	− 6.9	69.2	+ 1.3	57.8	+ 1.9	47.0	+ 6.5	31.4	+ 0.1	53.0	0.1
efferson City	30.0	− 0.4	41.2	+10.4	39.0	− 4.5	62.6	+ 5.4	63.6	− 1.5	70.4	− 3.6	75.0	− 2.9	69.3	− 7.4	71.0	+ 2.0	58.9	+ 2.2	49.0	+ 4.9	32.9	− 0.3	55.2	+ 0.4
ouisiana	24.4	− 3.3	39.0	+10.9	36.4	− 6.2	60.8	+ 7.4	62.3	− 1.6	69.7	− 1.9	73.3	2.9	68.2	− 6.7	69.8	+ 2.0	58.3	+ 2.5	49.6	+ 5.9	33.4	+ 2.3	53.8	+ 0.7
Macon	23.2	− 9.8	38.6	+12.8	33.4	− 7.9	60.0	+ 6.0	60.1	− 4.5	68.0	− 5.0	72.0	− 5.1	68.0	9.4	68.5	+ 0.3	57.4	− 0.7	45.4	+ 0.9	29.6	− 0.4	52.0	− 1.9
Mexico	24.6	− 4.4	37.6	+ 9.0	34.9	− 7.4	60.8	+ 6.5	61.8	− 2.4	69.2	− 4.1	74.2	− 2.7	69.2	− 6.9	69.5	+ 0.8	57.3	+ 0.7	47.3	+ 4.5	30.1	− 2.1	53.0	0.7
akfield	29.1	− 3.1	40.0	+ 8.3	37.3	− 8.4	62.0	+ 6.0	64.2	− 1.8	70.3	− 3.5	75.2	− 2.3	69.4	− 7.5	71.8	− 1.2	61.2	+ 2.4	51.6	+ 6.0	31.6	− 0.2	55.6	− 0.2
almyra	22.4	.....	37.4	.....	34.0	.....	59.6	.....	60.6	.....	68.1	.....	73.0	.....	68.0	.....	68.3	.....	55.2	.....	44.1	.....	28.8	.....	51.6	.....
St. Catharine	24.1	.....	36.4	.....	33.4	.....	59.9	.....	59.5	.....	68.0	.....	71.3	.....	67.7	.....	68.4	.....	57.6	.....	46.3	.....	30.2	.....	51.9	.....
St. Charles	28.4	− 2.8	39.6	+ 8.1	38.0	− 6.0	61.8	+ 6.4	63.9	+ 2.5	70.8	− 2.8	75.0	− 2.4	69.8	− 6.6	72.0	+ 5.6	60.6	+ 2.9	51.1	+ 6.4	31.1	0.7	55.4	− 0.9
St. Louis (1)	29.6	− 1.4	40.5	+ 7.0	38.5	− 5.0	63.2	+ 7.1	64.6	− 1.9	72.0	3.1	76.4	− 2.7	70.4	− 6.8	72.4	+ 2.4	61.7	+ 3.3	50.9	+ 7.5	35.4	− 0.1	56.3	+ 0.5
St. Louis (2)	28.4	.....	39.1	.....	37.5	.....	62.4	.....	64.2	.....	71.6	.....	76.2	.....	70.0	.....	72.3	.....	60.6	.....	50.0	.....	34.1	.....	55.5	.....
teffenville	24.6	− 4.1	38.6	+11.9	35.4	− 6.3	61.5	+ 8.8	62.8	− 1.6	70.7	− 2.2	74.6	− 2.8	69.8	− 7.0	71.0	2.4	60.0	+ 2.9	47.0	+ 3.4	30.8	+ 0.1	53.9	+ 0.5
nionville	17.1	− 6.2	34.0	+10.0	31.6	− 6.2	57.7	+ 6.8	57.9	− 4.9	66.0	− 6.2	70.5	− 6.4	67.0	− 8.7	67.0	− 0.4	58.2	+ 3.1	43.3	+ 3.6	27.6	− 0.4	49.8	0.1
andalia	26.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warrenton	25.8	− 3.6	36.8	+ 7.6	35.2	− 6.4	60.6	+ 5.9	62.8	− 2.2	69.8	3.8	74.6	3.0	68.8	− 8.4	70.8	+ 1.9	59.1	− 3.5	47.9	− 5.0	30.8	1.5	53.6	− 0.4
Southeast Lowlands.																										
ardwell	36.4[b]	.....	44.2	.....	42.3	.....	63.8	.....	69.2	.....	75.1	.....	.....	.....	73.6	.....	73.6	.....	63.4	.....	56.9[j]	.....	.....	.....	.....	.....
aruthersville	37.2	− 2.1	45.3	+ 7.9	43.4	− 7.7	65.6	+ 5.9	71.6	+ 2.6	77.4	+ 0.1	80.0	+ 0.2	75.4	− 3.7	75.8	+ 2.8	65.0	+ 4.1	54.2	+ 1.8	42.6	2.9	61.1	0.2
oniphan	33.6	− 3.9	42.2	+ 5.3	40.6	− 9.4	62.6	+ 5.0	67.7[a]	+ 1.6	73.9	− 0.9	77.5	− 0.3	72.2	− 5.4	72.1	+ 0.8	59.3	+ 1.6	51.3	+ 3.6	38.6	+ 1.2	57.6	− 0.1
ackson	33.8	− 0.5	41.8	+ 7.0	41.9	− 5.5	64.4	+ 7.9	67.0	+ 1.6	73.2	− 0.6	77.6	+ 1.1	73.0	− 2.8	73.5	+ 3.7	62.4	+ 5.3	54.6	+ 8.7	39.0	+ 2.5	58.5	+ 2.4
Marble Hill	33.1	− 1.3	42.0	+ 7.3	39.6	− 7.9	62.8	+ 6.7	66.8	+ 0.9	72.8	− 1.1	77.2	+ 0.1	69.8[j]	− 7.1	73.0	− 2.3	62.0	− 4.5	52.4	+ 6.9	37.8[a]	+ 1.8	57.4	1.1
oplar Bluff	34.1	− 3.3	41.8	+ 6.8	40.1	− 9.1	63.0	+ 3.1	67.2	− 1.6	73.2	− 2.7	77.1	− 1.5	72.7	− 5.9	72.4	+ 0.4	61.2	1.2	52.4	+ 5.4	39.8	− 2.2	57.9	− 0.4
reston	35.4	− 2.0	43.1	+ 8.1	41.5	− 7.6	61.0	+ 6.3	69.5	+ 2.7	76.2	+ 1.7	79.6	+ 1.6	73.6	− 4.1	74.4	+ 3.7	61.4	− 2.0	52.8	+ 4.8	40.9	+ 2.6	59.4	1.6
airo, Ill.	34.1	− 0.7	42.7	+ 5.1	40.4	− 6.6	63.6	+ 5.5	68.0	+ 0.5	74.4	− 0.8	78.1	− 0.5	72.6	− 4.4	73.8	− 3.6	63.2	+ 4.1	52.4	+ 5.5	39.3	+ 0.8	58.6	− 1.0
Ozark Plateau.																										
elle	31.7[d]	− 0.7	42.2	+10.5	37.8[k]	− 7.5[l]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
irchtree	32.6	− 2.1	40.8	+ 6.8	38.2	− 9.6	62.2	+ 5.2	64.4[b]	− 0.9	70.8	− 1.9	75.4[b]	− 0.8	70.2	− 5.9	71.0[g]	+ 1.1	58.4[c]	+ 0.4	51.2[a]	+ 5.0	37.6[l]	+ 1.6	56.1	− 0.1
olivar	32.3	− 2.5	41.4	+ 8.0	36.2	−10.3	62.5	+ 6.4	64.6	− 1.1	72.2	− 0.8	76.1	− 0.9	70.4	− 6.8	71.3	+ 0.9	59.8	+ 1.3	50.8	+ 3.9	37.0	+ 1.2	56.2	− 0.1
assville	27.2	.....	42.2	.....	36.7	.....	58.5	.....	63.3	.....	70.0	.....	72.4	.....	69.6	.....	71.0	.....	58.0	.....	51.0	.....	37.2	.....	54.8	.....
rocker	30.1	.....	40.6	.....	36.8	.....	64.7	.....	64.6	.....	69.5	.....	74.7	.....	69.7	.....	70.7	.....	61.9	.....	51.0	.....	34.3	.....	55.7	.....
ean	30.4[n]	− 6.9	.....	.....	36.2[i]	−13.1	62.1[e]	+4.8	64.7[b]	− 1.4	71.3[e]	− 1.7	75.0[c]	− 2.7	70.1[a]	− 7.9	72.4[a]	+ 1.1	62.0	+ 1.8	52.8	+ 3.1	41.8	+ 4.2	.....	.....
uncan	30.0	.....	38.2	.....	33.1	.....	60.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ldon	28.8	.....	40.8	.....	36.5	.....	62.3	.....	63.9	.....	70.0	.....	74.8	.....	70.0	.....	69.8	.....	59.2	.....	49.2	.....	34.3[a]	.....	55.0	.....
ruit City	33.0	.....	41.1	.....	40.8	.....	62.8	.....	68.7	.....	72.4	.....	76.7	.....	68.6	.....	72.3	.....	62.2	.....	50.6	.....	38.6	.....	57.3	.....
ano	30.5	− 3.8	40.2	+ 6.4	36.0	−11.6	62.2	+ 6.2	64.8	− 1.1	70.9	− 2.4	75.2	− 1.7	69.6	− 7.4	71.0	− 0.6	60.2	+ 2.3	51.5	+ 4.2	35.6	− 0.1	55.6	− 0.7
oodland	29.7	− 4.3	40.4	+ 7.4	37.2	− 8.9	59.1	+ 4.6	63.6	+ 0.4	69.6	− 1.5	73.8	− 0.3	70.0	− 4.6	69.0	+ 0.5	.....	.....	47.8[j]	+ 2.1	35.9	+ 1.1	.....	.....
Hollister	35.8	.....	41.6	.....	38.8	.....	64.2	.....	66.3	.....	73.9	.....	78.3	.....	73.0	.....	72.4	.....	61.6	.....	53.3	.....	41.4	.....	58.4	.....
Houston	32.4	− 1.6	41.0	+ 7.7	36.6	−10.2	61.5	+ 5.9	64.4	− 2.6	71.3	− 0.6	75.2	− 0.6	69.0	− 6.2	70.2	− 1.4	58.6	+ 1.6	51.9	+ 6.0	37.6	+ 1.4	55.8	+ 0.2
ronton	31.0	− 1.3	40.6	+ 7.2	37.6	− 7.5	60.2	+ 4.8	64.2	− 0.4	71.4	− 0.6	75.0	− 0.6	69.8	− 4.5	70.0	+ 2.3	58.0	+ 2.1	50.0	+ 6.6	35.7	+ 1.4	55.3	− 0.8
oshkonong	34.8	− 2.4	41.8	+ 5.5	40.0	−10.0	65.5	+ 8.0	68.9	+ 2.0	74.8[a]	+ 0.5	77.4[a]	0.7	.....	.....	72.6	+ 1.5	62.3	+ 2.7	53.3	+ 3.7	40.5	+ 3.2	.....	.....
ebanon	32.6	− 1.0	40.4	+ 6.7	36.9	− 9.2	63.6	+ 7.3	65.4	− 0.4	72.1	− 2.9	76.4	− 0.2	70.2	− 6.2	71.8	+ 1.8	61.1	+ 2.6	51.0[d]	+ 5.0	36.6	+ 1.2	56.5	+ 0.4
ockwood	32.4	.....	39.9	.....	35.2	.....	62.2	.....	63.1[c]	− 1.4	72.0	− 2.3	75.3	− 1.8	70.4	6.5	72.0[a]	0.0	60.4	+ 2.4	50.7[b]	+ 2.1	35.4	− 0.5	55.8	.....
Mountain Grove	31.0	− 3.2	38.8	+ 5.6	35.0	−11.9	60.6	+ 6.1	63.6	− 0.8	70.3	− 1.5	74.4	1.7	68.6	− 6.9	69.7	+ 0.8	58.6	− 1.1	49.5	+ 2.4	36.6	+ 1.9	54.7[l]	− 0.7
Mount Vernon	29.0[k]	− 6.0	40.6[d]	+ 7.3	35.4	−11.0	61.2	+ 5.5	66.0	− 0.1	71.3	− 2.4	76.1	− 1.8	68.4[c]	− 9.5	71.7	+ 0.2	59.1[c]	+ 0.2	.....	.....	40.6[f]	+ 4.0	.....	.....
Neosho	35.0	− 0.1	42.8	+ 6.9	37.2	−11.2	61.4	+ 3.2	64.6	− 1.6	72.6	− 1.1	75.1	2.5	70.7	− 6.2	72.0	− 1.6	60.4	+ 1.2	52.6	+ 5.7	40.2	+ 3.7	57.0	0.0
Rolla	29.4	− 2.3	38.6	+ 3.4	35.7	− 9.2	61.4	+ 6.3	61.0	− 0.7	70.8	− 2.1	75.0	− 2.2	69.4	− 6.4	70.4	+ 2.7	59.1	+ 4.5	49.4	+ 5.2	34.6	+ 1.3	54.8	0.0
pringfield	32.2	+ 0.9	39.8	+ 6.2	35.1	− 8.4	61.8	+ 6.1	63.2	− 1.4	70.3	− 2.0	74.0	− 2.4	68.8	− 6.0	70.7	+ 2.8	60.4	− 3.1	50.7	+ 6.3	37.6	+ 2.1	55.4	+ 0.6
Southwest Plain.																										
Amoret	30.2	.....	40.8	.....	35.6	.....	61.8	.....	64.2	.....	71.8	.....	75.8	.....	70.8	.....	71.8	.....	61.6	.....	51.3	.....	36.6	.....	56.0	.....
Appleton City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.3	.....	.....	.....	.....	.....
linton	29.2	.....	41.2	.....	35.4	.....	62.8	.....	64.6	.....	72.0	.....	75.6	.....	70.0	.....	71.2	.....	60.7	2.3	51.8	+ 4.4	35.6	.....	55.8	.....
Harrisonville	26.1	− 1.2	37.7	+ 8.2	33.4	− 7.1	64.0	+ 7.0	63.0	− 0.8	69.8	− 3.4	74.0	− 3.4	69.1	6.2	69.6	+ 1.5	58.2	− 2.3	47.8	+ 5.8	32.8	1.6	53.5	0.3
Lamar	32.0	− 0.7	39.8	+ 5.7	35.3	−11.4	61.7	+ 4.8	63.8	− 1.9	71.4	− 2.5	75.9	− 2.2	71.1	− 6.1	72.3	+ 1.9	61.0	+ 2.3	51.1	+ 4.8	37.2	− 1.8	56.0	− 0.3
Lamonte	27.8	.....	39.3	.....	35.0	.....	60.4	.....	61.9	.....	70.1	.....	73.4	.....	70.6	.....	71.4	.....	59.5	.....	47.4	.....	33.0	.....	54.2	.....
Marshall	26.4	− 1.8	38.8	+10.1	34.9	− 7.5	60.8	+ 6.8	62.4	− 1.8	69.6[a]	− 3.2	74.1	− 2.7	68.9	− 7.1	69.8[a]	+ 1.2	59.1	+ 2.5	43.8[c]	+ 1.1	32.6[c]	− 1.4	53.5	0.1
Nevada	31.0	.....	39.4	.....	34.8	.....	62.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.6[m]	.....	59.6	.....	48.1	.....	36.1	.....	.....	.....
Warrensburg	29.0	+ 0.3	39.7	+ 8.8	35.6	− 7.7	62.6	+ 6.6	64.4	− 1.0	71.2	− 2.8	75.8	− 2.8	70.4	6.7	71.4	− 1.5	61.0	+ 3.0	50.0	+ 5.4	34.2	− 0.2	55.1	0.4
Warsaw	30.1	− 3.5	41.7	+ 8.1	36.0	−11.4	62.8	− 7.0	63.9	− 2.2	71.8	− 2.5	75.6	− 2.6	70.3	− 7.9	71.7	− 0.3	60.2	− 2.1	51.6	+ 4.1	36.4	− 1.2	56.0	0.6
Northwest Plateau.																										
Avalon	25.6	− 2.4	37.8	+10.9	35.2	− 6.7	61.6	+ 8.7	63.0	− 1.3	70.4	− 2.5	74.0	− 3.4	71.5	− 5.7	70.2	+ 1.2	63.0	+ 5.4	50.0	+ 6.1	33.5	+ 3.2	54.6	+ 1.1
ethany	23.4	− 1.3	35.0	+ 9.1	32.6	− 6.5	60.5	+ 9.6	60.6	− 1.8	68.8	− 3.2	72.1	− 3.1	68.4	5.9	68.2	+ 1.7	57.5	+ 3.7	44.7	+ 1.3	28.8	− 3.2	51.7	0.0
onception	22.6	− 2.4	33.2	+ 7.1	31.6	− 7.4	59.7	+ 7.7	60.4	− 0.7	67.6	− 3.1	71.1	− 4.5	67.4	− 6.5	66.4	− 0.4	57.4	+ 1.9	46.2	+ 5.3	29.9	0.1	51.1	− 0.2
rant City	22.6	− 2.2	33.8	+ 7.8	32.4	− 8.1	60.0	+ 8.4	60.6	− 1.6	67.8	− 3.4	71.1	− 4.9	68.8	− 6.7	68.0	+ 1.1	58.2	+ 3.2	45.1	+ 2.4	30.0	− 2.2	51.5	− 0.2
Kansas City	28.6	+ 2.2	38.2	+ 8.3	34.7	− 6.1	62.2	− 7.9	62.4	− 2.1	70.0	− 3.6	74.6	− 3.6	70.1	− 5.7	70.0	+ 2.5	62.0	+ 6.2	50.0	+ 8.5	34.8	− 3.3	54.8	1.6
Kidder	25.8	− 0.4	36.2	+ 9.8	32.8	− 8.0	60.5	+ 7.9	61.4	− 1.6	68.6	− 3.6	71.6	− 4.9	69.1	− 6.0	68.8	+ 1.4	59.9	+ 3.8	47.4	+ 6.6	31.4	− 2.0	52.8	+ 0.5
Lexington	27.0	− 0.5	38.2	+ 9.6	34.9	− 8.2	62.0	+ 7.8	62.6	− 1.4	70.0	− 2.2	74.2	− 2.3	69.7	− 5.9	70.2	+ 1.9	60.4	+ 2.8	49.3	+ 5.8	33.1	+ 2.1	54.3	0.8
Liberty	27.3	− 1.4	37.1[l]	+ 8.2	35.6	− 6.9	62.4	+ 7.4	63.2[a]	− 0.8	70.2	− 3.1	74.6	− 2.7	70.0[a]	− 6.3	70.5	+ 1.4	60.5[i]	+ 3.3	49.6	+ 6.7	34.2[d]	+ 2.6	54.6	+ 0.7
Maryville	20.8	− 2.0	32.6	+ 9.6	31.2	− 5.9	59.6	+ 8.7	60.0	− 2.4	68.0	− 3.2	71.6	− 4.5	68.1	− 6.6	67.0	1.0	56.6	+ 3.1	43.8	+ 4.6	28.6	− 2.3	50.7	0.1
regon	26.0	+ 2.4	35.8	+ 7.8	32.8	− 6.0	59.6	+ 7.1	59.8	− 3.5	67.4	− 4.9	70.5	− 4.7	67.1	− 8.0	66.8	− 0.2	57.9	+ 3.0	46.4	+ 5.5	31.2	2.5	51.8	0.1
St. Joseph	25.6	.....	35.7	.....	33.0	.....	61.6	.....	61.6	.....	69.8	.....	73.3	.....	69.8	.....	69.6	.....	59.8	.....	47.7	.....	32.0	.....	53.3	.....
arkio	22.8	.....	33.1	.....	31.8	.....	59.6	.....	59.8	.....	68.4	.....	71.5	.....	68.4	.....	67.8	.....	58.2	.....	45.6	.....	31.0	.....	51.5	.....
renton	26.0	− 1.1	35.8	+ 8.5	33.4	− 7.1	60.8	+ 8.0	61.6	− 2.4	69.6	2.9	73.4	− 3.3	69.2	6.2	68.8	+ 1.4	57.2	+ 1.2	46.6	+ 4.2	31.6	+ 1.9	52.8	+ 0.2

Monthly Maximum Temperatures for the Year 1915, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date
Northeast Plain.																								
Brunswick	60	15	64	10	60	24	88	28	92	13	87	12	90	11	89	16	89	11†	86	3	85	6	54	3
Columbia	61	15	69	12	63	24	86	23	90	13	89	5	93	30	88	16	91	11	85	3	84	6	54	22
Fayette	60	15	67	12	59	24	87	28	91	13	86	12	89	10†	90	1	88	10†	85	3	83	6†	52	8
Fulton	60	16	70	12	63	24	87	28	93	13	88	12	93	30	91	16	88	6†	85	3	84	5†	55	8†
Hannibal	60	16	65	12	60	24	84	25	92	13	89	12	92	11	89	16	89	10	84	3	82	7	54	8
Jefferson City	65	15	69	10	70	24	90	28	91	13	89	6	94	28	92	16	90	11†	84	3	87	6	57	22
Louisiana	58	16	67	12	62	24	84	16†	93	13	87	6	94	28	86	15	90	12†	85	31	87	8	54	8
Macon	57	15	63	12	60	24	86	28	92	13	88	12	90	14	90	16	89	10†	85	3	82	6	54	8
Mexico	59	15†	69	12	63	24	87	21	94	13	91	5	94	14	93	16	92	12†	85	3	84	7	54	8
Oakfield	60	16	71	12	61	24	87	27†	92	13	89	12	94	11†	90	1†	91	11†	84	3†	84	6	56	8†
Palmyra	59	16	68	13	60	24	84	24†	93	14	90	12	92	14	91	16	90	10†	83	3	82	6	52	8
St. Catharine	57	15	58	11	57	24	84	28	91	13	84	6†	86	14†	86	7†	85	13	83	3	79	6	52	3†
St. Charles	60	16	71	12	64	14	87	27	93	13	88	6	99	26	91	1	92	14	84	31	85	6	55	8†
St. Louis (1)	59	16	69	12	61	24	86	27	91	13	90	12	94	15	92	16	91	12	82	3	81	6	56	22
St. Louis (2)	58	16	68	12	58	24	86	23†	91	13†	90	12	94	14	91	16	91	12†	83	31	81	6	54	22
Steffenville	57	15†	65	12	60	24	87	25†	97	12	90	12	94	31	93	15	92	12	88	3	85	6	55	8
Unionville	40	16	58	17	56	24	83	28	92	13	86	12†	89	17	88	1†	88	12	85	3	80	6	56	7
Vandalia	57	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warrenton	59	16	70	12	61	24	87	27	92	11	91	12	94	28	91	2	91	11†	83	3	83	6	53	22
Southeast Lowlands.																								
Cardwell	64	15	65	11†	67	25	90	28	95	14	98	20	....	....	94	1†	95	13	95	28	85	7	....	....
Caruthersville	61	14	66	11†	67	25	92	28	91	14	96	20	99	30†	92	1†	94	13†	85	3	83	1†	65	16
Doniphan	60	16	64	12	67	25	89	28	94	14	96	20	101	30	91	1†	90	11†	81	3†	82	1†	61	8†
Jackson	58	15	67	12	67	28	93	28	96	13†	93	5†	99	29†	95	6	95	13†	85	29	85	5	63	17
Marble Hill	60	16	68	12	64	25	90	25†	94	13	91	27	100	29	93	16	93	11†	84	28	85	5†	60	8†
Poplar Bluff	62	13†	66	12	67	24	91	28	95	11†	96	20	99	31	98	1	93	13†	85	21	84	6†	63	9
Sikeston	59	7	65	12†	69	14	91	28	95	14	98	17	102	30	94	2†	95	12†	84	3	85	10	68	2†
Cairo, Ill.	57	15	63	13	64	25	87	28	92	14	91	20	97	30	91	16	92	13	83	3	81	1	62	16
Ozark Plateau.																								
Belle	64	....	72	12	65	24	90	28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Birchtree	63	16	63	10†	64	25	91	28	92	14	90	20	97	29†	90	6	89	12†	81	3	78	7	59	3
Bolivar	62	15	67	12	63	24	89	28	91	13†	91	20	98	30	92	16	91	11	81	3	83	6	61	10†
Cassville	66	15	66	10	62	24	84	27	89	12	91	20	94	28†	91	5	90	11†	85	25	85	1	62	20
Crocker	69	16	69	17†	59	25	90	27†	89	14†	87	5†	95	30†	95	1	90	12†	83	3	85	3	65	23
Dean	66	14	68	10	63	14	88	28†	89	13	92	20	95	30	91	16	92	11	85	3†	83	1†	84	3
Duncan	59	13	58	10†	54	14	87	28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	61	15	71	12	62	24	90	28	90	13	90	5	95	30	92	16	91	4	83	3†	81	7	60	22
Fruit City	61	16	65	12	62	25	91	28	93	13	89	6	93	15†	91	16	91	13	84	28†	84	1	62	8
Gano	63	16	68	12	61	24	91	28	94	14	89	5†	97	30	93	16	92	11	84	28	85	6	55	3
Goodland	63	16	68	12	63	14	91	28	94	14	89	5	96	31	90	17	91	11	....	....	72	6†	59	3
Hollister	76	15	70	12	68	14	90	28	94	14	96	9†	102	29	94	15†	94	9†	88	3†	85	6†	68	6†
Houston	61	16	65	12	61	14	88	28	91	13	89	20	95	30	89	1	83	12	84	29	83	6	60	5
Ironton	61	16	69	12	63	14	91	28	94	13	90	6†	95	30†	92	16	91	11	83	28	82	5	58	3†
Koshkonong	63	16	65	12	66	25	90	28	93	14	93	20	98	30	90	1†	90	11†	84	28	86	6	68	5
Lebanon	64	14	67	12	64	24	93	28	92	13	95	22	97	29	92	15	93	17†	90	22†	86	6	62	5
Lockwood	66	15	60	12†	58	24	86	28	88	14	92	20	93	18†	90	16	90	11	85	3	83	6	57	8
Mountain Grove	62	15	64	12	61	14	89	28†	91	13	89	20	96	30	89	1	88	11†	81	28†	85	7	62	5
Mount Vernon	....	....	....	....	60	24	90	28	89	13†	92	20	97	30	91	16	95	27	85	3	....	....	65	31
Neosho	66	15	68	10	61	14	87	28	88	13†	92	20	93	13†	93	16	92	11	84	3	84	6	65	9
Rolla	61	16	68	12	62	24	90	28	92	13†	92	5	94	11†	90	1†	98	14	83	3	85	6	60	31
Springfield	60	15	65	12	59	24	84	28	86	14	90	20	92	30	88	16	87	11	82	3	80	6	60	22
Southwest Plain.																								
Amoret	66	15	65	11	57	15	86	27†	92	12	93	10	95	18	92	6	93	11†	91	3	87	7	68	10
Appleton City	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	90	1†	....	....
Clinton	62	15	70	12	61	24	89	28	94	25	94	29	95	30	92	16	93	11	89	3	85	6	62	10†
Harrisonville	53	14†	64	11	56	24	89	28	97	15	89	10	93	18	90	16	91	11	84	3	82	6	56	22
Lamar	66	15	66	11	59	24	86	28	88	13†	93	29	95	18	93	16	92	11	86	3	84	6	65	31
Lamonte	63	15	65	12	59	24	89	28	91	14	89	5	93	27†	92	16	92	2†	82	2	85	7	59	23
Marshall	62	15	68	12	60	24	90	28	93	13	88	12	92	28	91	16	90	10†	85	3	83	6	54	22
Nevada	61	15	61	12	56	24	84	28	....	....	....	....	....	....	....	....	89	14	85	3	84	6	63	10
Warrensburg	63	15	65	12	58	24	90	28	93	13†	91	10	96	30	95	16	95	11	89	3	85	6	60	22
Warsaw	67	15	68	11†	64	24	90	28	91	13	92	5	97	18†	93	16	93	11	87	3	86	6	63	10
Northwest Plateau.																								
Avalon	60	15	60	10†	60	24	90	28	93	12†	88	25	90	17†	92	16	89	12	86	3	81	6†	54	8
Bethany	58	15	59	10†	55	24	91	28	94	13	88	12†	90	17	89	7†	90	12	82	24	82	6	50	22
Conception	54	15	58	11	53	24	88	28	92	13†	89	30	89	17	87	16	87	12†	79	24	79	6	55	22
Grant City	54	15	58	11	56	24	90	28	97	13	90	12†	90	15	94	16	91	12†	82	23	80	7	52	7†
Kansas City	62	15	63	11	54	24	86	28	90	13	87	12	90	14	88	16	89	12	82	3	83	6	61	22
Kidder	60	15	60	10†	55	24	86	28	91	13†	85	12	87	15	87	16	87	12	81	3	81	6	58	22
Lexington	61	15	63	12	59	24	90	28	93	13	88	29	91	11†	90	16	90	10	85	3	83	6	58	22
Liberty	63	15	....	....	57	24	91	28	94	12†	89	25†	92	17	92	16	91	11†	85	29	86	6	62	22
Maryville	53	15	58	11	57	24	96	28	96	13†	91	25	93	16	91	16	91	7	81	24	80	6†	57	22
Oregon	55	15	59	11	56	24	85	28	90	14	85	25	88	15	85	1†	86	12†	78	24	79	7	57	22
St. Joseph	58	15	62	11	55	24	90	28	93	14	89	12	91	15	88	16	91	12	81	24	82	6	59	22
Tarkio	51	15	53	17	55	24	93	28	94	14	87	12	89	15	87	7†	89	12	82	29	78	6	60	22
Trenton	51	15	58	11	56	24	88	28	90	13†	87	25	87	10†	88	1†	86	12†	81	3	77	7	53	7

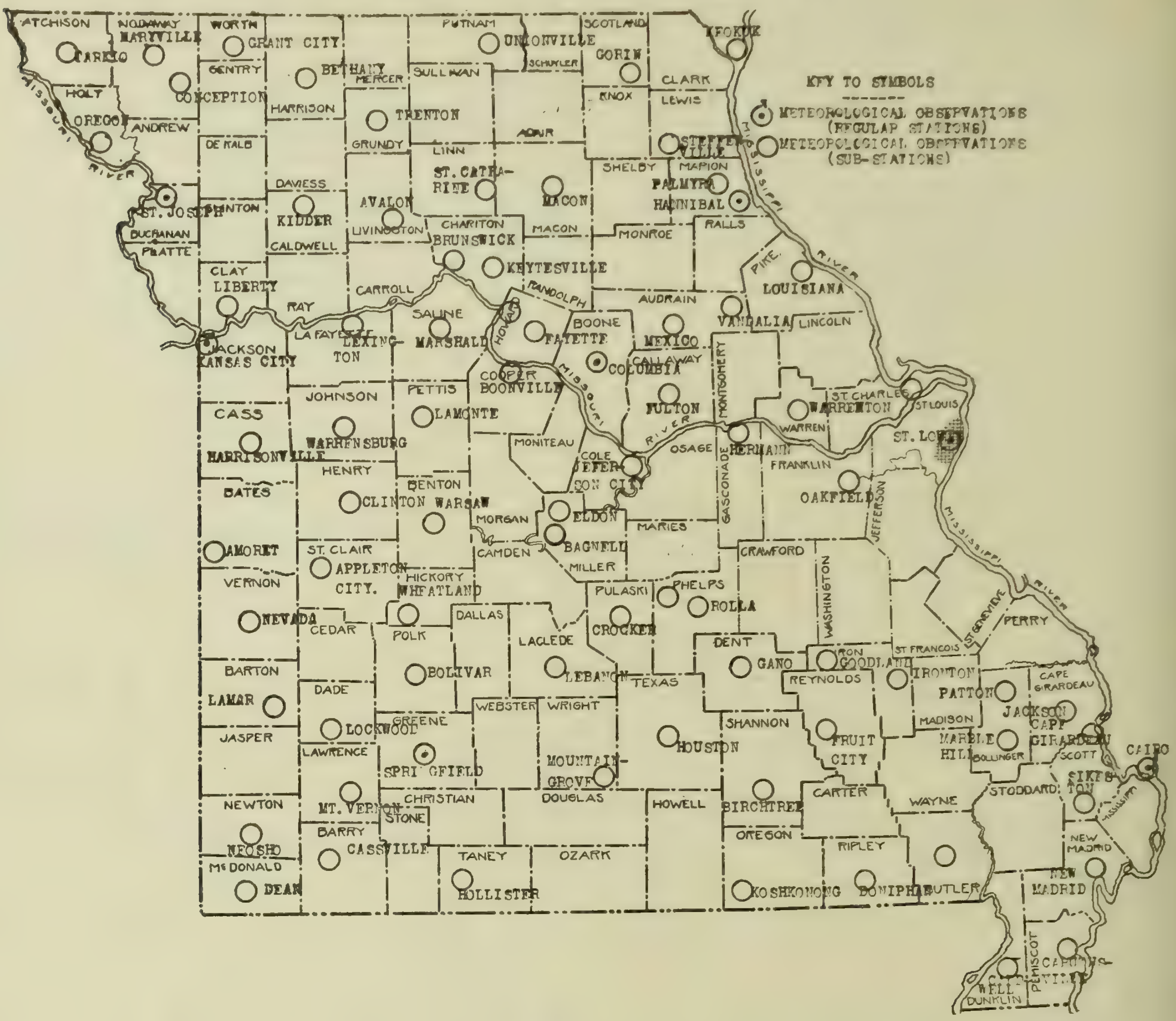
† also on other dates.

Monthly Minimum Temperatures for the Year 1915, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
Northeast Plain.																								
unswick	−19	29	17	7†	20	9†	25	3	41	5†	47	8	51	5	44	31	43	21	29	9	17	15	− 2	28
umbia	−13	28	19	8	22	9	28	3	39	9	46	8	50	5	40	31	44	21	29	9	18	15	0	28
yette	−19	28	16	6	18	9	28	3	39	22	46	8	51	5	41	31	42	21†	26	9	17	15	− 6	28
lton	−20	24	12	8	21	1†	25	3	37	9	41	8	49	5	39	31	39	22	27	9	16	15	−10	28
nnibal	−16	24	16	8	22	29	30	3	38	9	46	8	52	5	41	31	43	22	29	9	17	15	− 2	28
ferson City	− 9	28	19	8	23	9†	27	3	40	5	49	8	50	5	41	31	44	22	29	9	19	15	0	29
uisiana	−24	24	16	9	20	29	24	4	37	9	44	8	53	5†	38	31	44	21	24	9	16	15	− 8	28
acon	−18	28†	14	8	17	21	25	1	36	9	43	9	50	3	41	31	41	21	27	9	16	15†	0	28†
exico	−16	28†	16	9†	21	9†	23	1	39	9	44	8	51	5	39	31	40	22†	28	9	17	15†	− 5	28†
field	−11	28	17	8	24	9†	27	3	42	5†	52	9	51	5	47	31	42	21	29	9	18	15	6	28
lmyra	−18	24†	15	8†	22	9†	22	4	34	9	42	8	52	5	39	31	39	22	26	9	17	15†	8	28
Catharine	−20	28	14	6†	14	21	28	3	36	9	44	9	49	5	42	31	41	21	26	9	14	15	− 6	28
Charles	−12	28	19	8	23	29	25	3	41	9	45	8	50	5†	45	31	43	21	29	9	16	15	1	28
. Louis (1)	− 4	28	21	8	28	29	30	3	47	5	51	8	55	5	52	31	47	21	37	9	23	15	12	28
. Louis (2)	− 5	28	21	8	27	29	29	3	46	5†	54	8†	55	5	50	31	46	21	33	9	21	15	11	28
ffenville	−21	28	15	8	20	9†	32	13	35	9	42	9	49	5	41	31	44	30	26	9	15	15†	− 8	28
onnville	−23	28	10	8	13	21	24	3	35	9	38	9	50	3†	37	30	37	22	24	9	14	15	− 1	28
dalia	−13	28	17	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
arrenton	−12	29	17	8†	23	21†	25	1	41	17	46	8	52	5	45	31	42	21	31	9	16	15	4	28†
Southeast Lowlands.																								
twell	14	24	24	9	24	22	30	1	44	5†	52	9	54	6	48	31	43	22	29	9	27	16	....	....
ruthersville	14	24	26	8†	24	22	30	1	48	8	54	9	57	6	51	31	51	22†	36	9	25	30	25	20
niphan	10	24†	20	9†	22	21	26	1	41	9	51	9	51	5	44	31	41	22	29	9	19	30	19	20
kson	6	28	23	8†	24	22	26	1	40	5	51	9	50	5	43	31	40	22	28	9	21	30	19	28
arble Hill	6	28	19	9†	23	1†	25	1†	40	6†	50	8†	49	5	44	31	40	22	29	9	20	22†	19	27
plar Bluff	11	23†	22	8†	22	19	33	2	41	9	51	9	51	5	45	31	43	22†	31	9†	20	30	20	20
eston	10	19	24	9	21	22	28	1	45	5†	51	8	55	5†	41	31	44	22	32	9	25	15	19	28
iro, Ill.	10	24	25	8	24	22	30	1	48	5	56	8	60	5	50	31	49	22	36	9	26	15	20	28
Ozark Plateau.																								
le	−12	28	18	8	20	21	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
rchtree	5	23†	20	8	19	22	24	1	39	5	49	8	47	5	42	31	44	20	28	9	17	30	19	18
livar	0	28	18	8	16	6	25	1	38	9	44	8	48	5	41	31	42	21	29	9	19	15	3	28
ssville	5	21†	15	8	13	31	20	4	33	8	47	8	42	6	39	31	39	23	25	9	15	30	14	3
cker	− 4	28	23	2	21	6†	27	1	39	17	45	8	50	5†	39	31	47	1†	28	9	14	15	5	28
an	4	23†	....	....	16	6	22	3	36	9	42	14	46	5	42	31	43	1	28	9	17	15†	14	2†
ncan	2	23†	16	2	15	1	21	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
don	−10	28	18	8	21	21	26	3	38	17	45	8	51	5†	38	31	40	21†	28	9	17	15	− 1	28
it City	11	25	22	8	24	22	33	1	49	7	55	7†	55	4	48	18†	40	1	28	9	23	15	22	28
mo	− 3	28	17	8	20	21	22	3	39	9	46	8	47	5	39	31	37	22	27	9	17	15	10	28
lland	− 1	24†	14	9	17	1†	18	1	33	9	40	8	43	5	38	31	36	22	24	9	15	30	10	28
lister	6	23	18	8	20	1†	24	3	38	9	50	1†	56	4	42	31	40	22	30	9	18	30	18	20
uston	3	28	18	8	18	21	24	1	38	9	48	8	46	5	40	31	40	22	27	9	19	15†	14	28
nton	2	28	16	9	19	1	23	1†	34	9	45	8	43	5	37	31	34	22	23	9	17	30	17	26†
skonong	8	28	22	3†	20	22	28	1	44	5†	52	10	52	5	46	31	44	22	38	6	23	30	20	28
banon	4	22	24	3†	20	6†	25	1	39	9	50	2	50	5	38	31	35	22	27	9	17	15	5	28†
kwood	2	28	22	8	17	6	28	1†	41	17	48	8	50	5	45	31	44	21	31	9	21	15†	6	28
untain Grove	4	23†	19	8	16	22	24	1	37	9	48	8	45	5	39	31	42	21	27	9	19	30	14	28
unt Vernon	5	23	....	....	16	1	24	3	38	9	46	8	47	5	42	31	43	21	29	9	....	....	9	28
sho	6	23	18	8	14	1	23	3	37	9	46	8	46	5†	40	31	43	22	28	9	18	30	11	28
lla	− 4	28	7	8	21	1†	25	1	39	9	46	8	50	5	42	31	37	22	28	9	18	15†	8	28†
ringfield	3	23	22	8	19	21	29	1	42	17	50	8	51	5	48	31	45	21	34	9	24	30	12	28
Southwest Plain.																								
moret	−13	28	18	6	14	6	24	3	38	9†	48	8	50	5	44	30†	45	22	28	9	19	15†	2	28
pleton City	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	20	11	....	....
nton	−10	28	12	16	6	6	25	2	40	5†	48	8	50	5	42	31	41	21	28	9	18	15	0	28
rrisonville	−13	28	17	9	17	6†	23	3	37	9	49	15	49	5	44	31	42	21	30	9	16	16	2	29
mar	1	28	21	6	17	6†	25	3	40	9	47	8	49	5	44	31	44	21	31	9	21	15	5	28
monte	−23	28	17	8	20	6†	26	2	35	8†	45	8	48	5	38	31	40	21	25	9	13	15	13	28
rshall	−16	28	13	8	19	10	25	3	36	5	45	8	46	5	41	31	39	21	26	9	15	15	− 6	28
vada	− 6	28	20	25	16	6†	29	1	....	....	....	....	....	....	....	....	42	21	30	9	20	15	4	28
rrensburg	−14	28	18	6	20	6	26	3	41	17	48	8	51	5	43	31	40	21	30	9	19	15	2	28
rsaw	−14	28	17	8	20	6	22	3	38	9	45	8	47	5	40	31	43	21†	27	9	16	15	− 6	28
Northwest Plateau.																								
alon	−18	28	15	6	18	21	27	3	40	9†	46	9	53	3†	44	30	40	21	30	9	20	15	8	28†
thany	−23	28	11	8	13	12	21	3	30	9	40	9	47	3	39	30†	37	21	22	9	12	15	− 4	28
nception	−20	28	9	6	18	21	31	1†	38	17†	43	9	51	5	41	30	40	21	30	9	18	15	2	28
ant City	−19	28	11	6	14	12	26	3	38	9†	43	9	49	5	42	30	39	21	27	9	17	15†	1	28
nsas City	−10	28	16	6	21	21	31	1	39	18	52	9	56	5	47	30	47	21	38	9	27	14	9	29
lder	−15	28	13	6	19	12	30	3	38	17	46	9	52	5	42	30	41	21	33	5	20	15	8	28
xington	−14	28	17	8	19	12†	28	3	38	9	49	1†	50	5	43	31	43	21	29	9	22	30	0	28
erty	−13	28	....	....	20	21	26	3	39	9†	47	8†	50	5	43	30	43	21	31	9	19	15	3	28
ryville	−18	28†	8	7	17	21	25	1	36	9	41	9	49	5	39	30	38	21†	26	9	17	15	0	28
egon	−16	28	11	6	17	1†	23	3	37	17	44	9	49	5	41	30	39	21	30	9	19	30	0	28
Joseph	−12	28	13	6	19	21	29	3	37	9	48	9	54	4	46	30	44	21	29	9	23	15	4	28
rkio	−22	28	7	8	15	1†	26	3	33	9	42	9	49	5	40	30	38	21	26	9	19	30	0	28
nton	−16	28	13	6	19	12†	27	3	37	9	45	9	54	4†	42	30	41	21	28	9	19	15	0	28

† also on other dates.

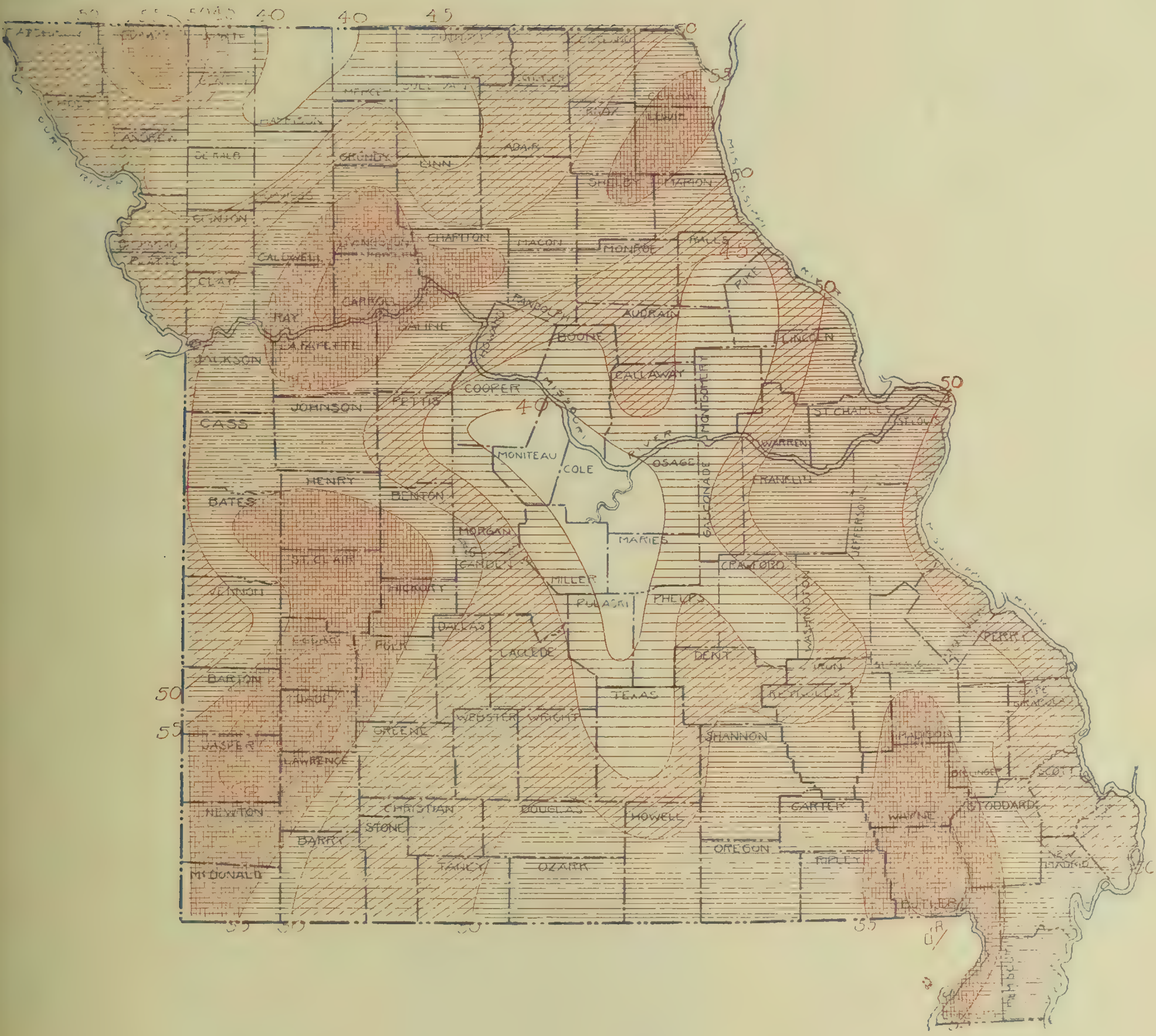
OBSERVATION STATIONS.



COOPERATIVE OBSERVERS.

Stations.	Name.	Stations.	Name.	Stations.	Name.
Amoret	Darby Fruit Farm.	Gorin	J. W. Pulliam.	Mountain Grove	Mo. Fruit Exp. Sta.
Appleton City	E. F. Hirni.	Grant City	W. H. Campbell.	Mount Vernon	J. R. White & Son.
Arlington	G. V. Randolph.	Hannibal	U. S. Weather Bureau.	Neosho	W. O. Buck.
Avalon	F. G. Ashbaugh.	Harrisonville	A. J. Sharp.	Nevada	Mrs. C. Jewell.
Bagnell	Mrs. Nellie V. Houser.	Hermann	C. T. Maushund.	New Madrid	Miss Josie Smith.
Bethany	M. H. Moulton.	Hollister	W. P. Chapmann.	Oakfield	E. E. Steines.
Birchtree	V. H. Kirkendall.	Houston	R. F. Harmon.	Oregon	Tom Curry.
Bolivar	A. C. Fink.	Ironton	W. H. Delano.	Palmyra	W. B. Markell.
Boonville	C. Randecker.	Jackson	L. M. Bean.	Patton (near)	George F. Ellis.
Brunswick	Loius Benecke.	Jefferson City	Miss Emma Swift.	Poplar Bluff	Albert E. Cox.
Cape Girardeau	D. L. Albert.	Kansas City	U. S. Weather Bureau.	Rolla	Prof. Elmo G. Harris.
Cardwell	F. E. Tate.	Keytesville	J. T. Dewey, M. D.	St. Catherine	L. D. Baker.
Caruthersville	H. E. Averill.	Kidder	J. F. Sharp.	St. Charles	L. C. Saeger.
Cassville	Mrs. Zuma Bloomer.	Koshkonong	R. M. Hitt.	St. Joseph	U. S. Weather Bureau.
Clinton	A. E. Derwent, M. D.	Lamar	E. H. Adams.	St. Louis (1)	U. S. Weather Bureau.
Columbia	U. S. Weather Bureau.	Lamonte	J. Ed. Hall.	St. Louis (2)	St. Louis University.
Conception	Fr. Adelhelm Hess.	Lebanon	O. L. Weissgerber.	Sikeston	H. B. Derr.
Crocker	Roy W. Reed.	Lexington	J. W. Keithley.	Springfield	U. S. Weather Bureau.
Dean	H. E. Dean	Liberty	W. C. Wilmott.	Steffenville	Frank Hall.
Doniphan	W. W. Martin.	Lockwood	C. S. Crow.	Tarkio	John F. Frazier.
Eldon	E. H. Shepherd.	Louisiana	J. T. Farrell.	Trenton	W. H. Estes.
Fayette	Prof. T. B. Smith.	Macon	John A. Cook.	Unionville	Geo. W. Davis.
Fruit City	R. C. Walton.	Marble Hill	Dr. A. F. Hendricks.	Warrenton	Prof. J. H. Frick.
Fulton	Dr. C. W. Knapp.	Marshall	Prof. W. H. Black.	Warrensburg	Geo. H. Collins.
Gano	A. C. Leach	Maryville	J. R. Brink.	Warsaw	J. R. Smith, M. D.
Goodland	F. M. Adams.	Mexico	J. F. Llewellyn.	Wheatland	Mrs. S. A. Jackson.

TOTAL PRECIPITATION FOR YEAR 1915.



SCALE OF SHADES—Inches.

☐	▤	▨	▤	▦
Less than 40	40 to 45	45 to 50	50 to 55	more than 55.

05
MS
Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

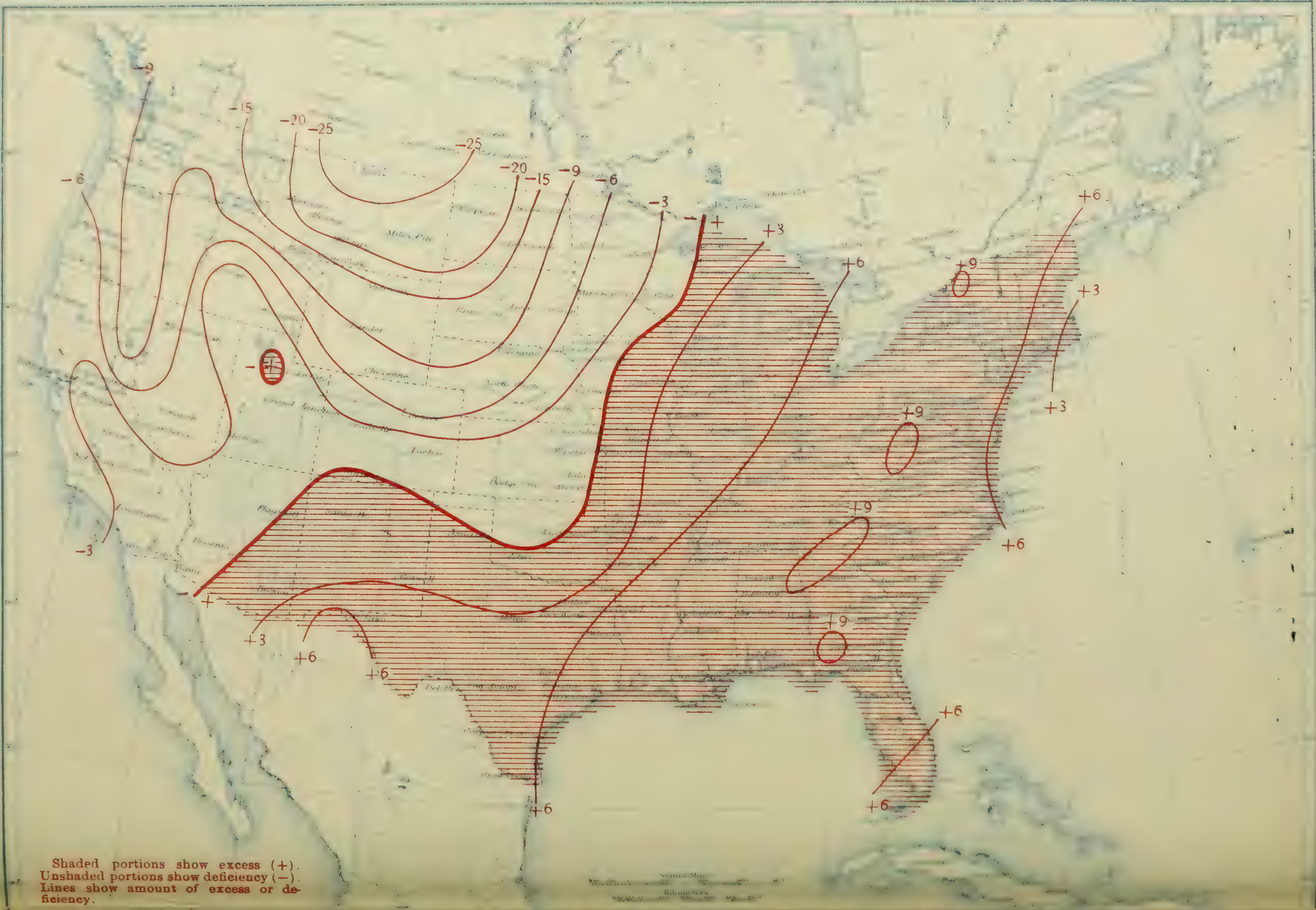
JANUARY, 1916

BY
GEORGE REEDER
SECTION DIRECTOR

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
FEBRUARY 23, 1916

Departure of the Mean Temperature from the Normal, January, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (-).
Lines show amount of excess or deficiency.

J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

. XX. COLUMBIA, MO., JANUARY, 1916. No. 1

GENERAL SUMMARY.

he month was characterized by marked temperature emes, much cloudiness, and frequent and excessive precipion, much of it being sleet. Ice covered the ground during h of the month, and there is some apprehension that injury result to wheat. Peaches were injured by the cold wave he 12th-13th. Ice in large quantities, of good quality, was sed. Severe floods occurred in the Osage watershed, and in southeast lowlands.

iewing the temperature conditions of the State as a whole, monthly mean differed but little from the normal, but takthem by localities or sections we find that the distribution not uniform, and in fact quite unusual. For instance, the ern half of the northeast plain, eastern part of the Ozark eau and all of the southeast lowlands were much warmer normal, while the western half of the State was colder normal. Three cold waves swept over the State, the one e 12-13th being the most severe, and reached to the southboundary. The first four or five days was the warmest d of the month, with day temperatures ranging from near to above 70°; the coldest period was near the middle of nonth, when minimum temperatures were near zero in the heast to as much as 24° below zero in the northwest.

recipitation was markedly excessive in all divisions, the age for the State, 7.36 inches, being the greatest for Janu during 49 years. Precipitation occurred in some part of State almost daily. Eleven stations, nine being in the k plateau, received over 10 inches, and six stations in the ks received more than 12 inches. Most of the Ozark rivers flowed their banks, and floods from the Black and Current s, in the southeast, were the worst ever known, so it is rted.

nows were frequent but not unusually heavy, but sleet was nly frequent but heavy, and resulted in much damage to raph and telephone wires, poles being broken down by the dreds. The ice covered ground also made it dangerous pedestrians, and seriously interfered with all traffic in ral.

e unusual phenomena of thunder and lightning with snow eet occurred on several days.

TEMPERATURE.

e monthly mean temperature, 66 stations reporting, was °. The mean departure from the normal for 53 stations ng 10 or more years' record was plus 0.7°. The mean for northeast plain was 29.4°, or 0.3° above normal; southeast nds, 41.0°, or 5.3° above normal; Ozark plateau, 35.5°, 2° above normal; southwest plain, 30.1°, or 0.1° below al, and northwest plateau, 24.2°, or 1.3° below normal. peratures were 32° or lower on an average of 24 days, and were zero or lower on 3 days.

HUMIDITY.

e average relative humidity, determined from 8 Weather eau stations, was 80 per cent, or about 4 per cent above al.

PRECIPITATION.

e average precipitation, 77 stations reporting, was 7.36 es. The departure from the normal for 66 stations having more years' record was plus 5.16 inches. The monthly ges and departures for the five divisions of the State were llows: northeast plain, 6.63 inches, excess 4.60 inches; southeast plain, 9.27 inches, excess 5.15 inches; Ozark plateau, 9.90 inches, excess 7.56 inches; southwest plain, 6.85 inches, excess 5.41 inches, and northwest plateau, 3.77 inches, excess 2.55 inches. The greatest local monthly precipitation was 14.12 inches, at Mount Vernon, and the least was 1.37 inches, at Tarkio. The greatest amount recorded in any 24 consecutive hours was 4.65 inches, at Ironton on the 30th.

The average snowfall was 3.4 inches, which is below normal. There was much sleet, however.

The average number of days with 0.01 inch or more precipitation was 3.

WIND.

The prevailing winds were from the south, which is just the opposite from the usual direction for January. The total number of miles, and the hourly velocities differed but little from their respective normals. Winds were fresh to strong on three or four days only.

SUNSHINE AND CLOUDINESS.

The month was abnormally cloudy. The percentage of possible sunshine for the State, based upon the records of Kansas City, Columbia and St. Louis was about 17 below normal. At Columbia there was less sunshine than in any January, but one, since 1890.

MISCELLANEOUS PHENOMENA.

Fogs—1st, 8th, 9th, 10th, 11th, 20th, 21st, 26th, 28th and 29th. Halos, solar—5th, 6th, 7th, 8th, 12th, 14th, 15th, 16th, 18th, 19th and 21st. Halos, lunar—8th, 12th, 14th, 15th, 16th, 18th, 21st, 22d, 23rd and 25th. Sleet—6th, 7th, 10th, 11th, 12th, 19th, 25th, 26th, 27th, 28th, 29th, and 30th. Thunderstorms—1st, 11th, 20th, 21st, 29th and 30th.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

Stations.	Mean barometric pressure (sea-level)	Mean Relative Humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.15	81	......	102	34	7,316	9.8	32	nw.	5
Hannibal	30.16	82	......	......	......	7,790	10.5	36	sw.	1
Kansas City	30.17	80	74	127	42	10,185	13.7	46	n.	5
St. Joseph	30.17	87	80	120	40	7,746	10.4	39	nw.	1
St. Louis	30.17	77	66	107	35	12,248	16.5	49	s.	4
Springfield	30.16	88	82	112	36	9,920	13.3	34	nw.	12
Cairo, Ill	30.20	85	78	......	......	8,954	12.0	41	sw.	1
Keokuk, Iowa	30.18	82	79	122	40	6,634	8.9	30	w.	1

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	21.5	−8.7	74	−32	1.91	−0.08	.....	.....	6	....	....	....
1889	31.8	+1.6	69	−2	2.36	+0.37	.....	....	6	....	....	....
1890	33.8	+3.6	81	−19	4.25	+2.26	.....	.....	9	....	....	....
1891	34.1	+3.9	74	−1	1.52	−0.47	.....	4.3	6	....	....	....
1892	24.0	−6.2	67	−25	1.80	−0.19	.....	....	4	14	8	9
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+1.2	77	−35	2.21	+0.22	2.96	2.7	5	13	9	9
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+2.7	71	−9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+4.3	77	−9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	0.8	4	17	7	7
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+5.4	76	−8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+4.1	79	−5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	3.6	5	19	5	7
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+6.9	78	−1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18

Climatological data for January, 1916.

Stations.	Counties.	Temperature, in degrees Fahr.									Precipitation, in inches.				Number of days.					Observers.
		Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Northeast Plain																				
Boonville	Cooper	600	39	....	....	....	....	....	....	....	5.31	+3.34	1.40	....	15	9	6	16	se.	C. Randecker.
Brunswick	Chariton	652	36	27.2	−1.3	62	4	−12	14+	48	5.97	+4.26	1.77	2.0	9	9	0	22	nw.	Louis Benecke.
Columbia	Boone	784	26	30.6	+3.4	63	5	−11	13	47	6.80	+4.57	1.88	2.8	15	7	4	20	se.	U. S. Weather Bureau.
Fayette	Howard	725	31	27.2	−0.7	63	5	−15	13	53	6.60	+4.57	1.97	4.0	12	....	....	....	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	31.6	+0.5	65	26	−10	13	41	5.98	+3.39	1.75	2.5	11	9	4	18	nw.	L. A. Higley.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	5.19	+3.50	1.93	1.0	8	5	8	18	se.	J. W. Pulliam.
Hannibal	Marion	534	23	28.8	+2.1	61	1	−13	13	50	6.40	+4.20	1.61	4.8	14	10	3	18	nw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	....	....	....	....	....	....	5.83	+3.58	1.52	5.0	18	7	2	22	ne.	C. T. Mausemund.
Jefferson City	Cole	628	30	31.0	+0.6	65	5+	−10	13	52	6.89	+4.61	1.75	3.3	12	9	0	22	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	....	....	....	....	....	....	5.65	......	1.75	4.0	9	....	....	....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	27.6	−0.1	62	1+	−10	13	48	7.44	+5.38	1.63	3.0	13	8	6	17	w.	J. T. Farrell.
Macon	Macon	881	18	26.4	−5.2	62	4	−15	13+	42	6.76	+5.32	1.92	9.0	9	13	3	15	nw.	John A. Cook.
Mexico	Audrain	797	38	28.8	−0.2	62	4	−12	13+	39	6.11	+4.00	1.80	2.0	18	9	0	22	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	33.9	+1.7	65	1+	−7	13	43	8.37	+5.98	2.16	4.0	11	9	4	18	s.	E. E. Stevens.
Palmyra	Marion	652	4	27.9	....	63	4+	−14	13	53	8.29	+5.98	1.75	3.2	10	7a	6a	17a	nw.	W. B. Markell.
St. Catherine	Linn	914	3	26.5	....	59	1	−17	13	37	5.60	......	1.57	5.8	12	10	7	14	nw.	L. D. Baker.
St. Charles	St. Charles	614	38	32.6	+1.4	65	1+	−6	13	38	8.08	+5.75	2.37	3.0	9	10	4	17	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	34.1	+3.1	65	1	−4	13	48	8.53	+6.26	2.97	2.7	16	8	3	20	s.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	33.4	....	64	1+	−5	13	45	9.05	......	2.74	2.9	16	7	6	18	se.	St. Louis University.
Steffenville	Lewis	576	23	28.2	−0.5	61	5	−14	13	31	8.11	+5.79	1.90	7.5	12	12	6	13	s.	Frank Hall.
Unionville	Putnam	1,072	23	22.5	−0.8	58	1+	−20	13+	42	4.13	+2.07	1.35	3.5	10	11	2	18	s.	Geo. W. Davis.
Vandalia	Audrain	796	5	....	....	....	....	....	....	....	3.85	......	1.50	0.8	4	....	....	....	.....	C. B. Ellis.
Warrenton	Warren	865	25	30.5	+1.1	64	26	−10	13	40	7.48	+4.87	2.40	2.0	15	8	3	20	s.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	10.75	+6.10	2.10	0	15	7	1	19	n.	D. L. Albert.
Cardwell	Dunklin	225	5	43.6	....	72	3	9	13	40	9.25	......	2.70	0	11	6	6	19	n.	E. M. Perry.
Caruthersville	Pemiscott	220	25	43.2	+3.9	71	1+	10	17	29	8.95	+4.97	2.77	T.	11	10	3	18	se.	H. E. Averill.
Doniphan	Ripley	440	11	38.2	+0.7	66	1	4	13	46	8.65	+4.68	1.90	2.0	12	10	5	16	nw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	38.1	+3.8	66	27	4	13+	44	8.03	+4.40	1.85	0	13	6	2	23	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	38.7	+4.3	65	25+	3	13+	40	9.37	+6.13	2.00	0	10	11	8	12	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	....	....	....	....	....	....	10.51	+5.27	3.20	0	15	7	1	23	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	....	....	....	....	....	....	9.74	......	2.75	0	12	12	0	19	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	43.8	+6.4	67	2+	4	13	46	9.31	+5.75	1.30	1.5	13	11	1	19	.....	Albert E. Cox.
Sikeston	Scott	328	15	42.4	+5.0	69	1	6	14+	46	9.29	+4.80	2.25	0.2	16	14	2	15	s.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	40.0	+5.2	67	12	6	17	53	8.11	+4.29	2.78	0.2	16	7	6	18	s.	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	....	....	....	....	....	....	6.90	+4.88	1.55	3.0	14	10	0	21	nw.	G. V. Randolph.
Bagnell	Miller	594	....	....	....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	36.3b	+1.6	64	1	−3	13	53	8.37	+5.65	1.95	1.5	11	11	0	20	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	34.6	−0.2	67	26	−8	13	54	7.81	+5.81	3.15	6.5	10	11	5	15	ne.	A. C. Fink.
Cassville	Barry	1,500	5	....	....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	32.5	....	66	5+	−10	16	45	7.35	......	1.47	10.0	9	15	3	13	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	44.2	+6.9	65	1+	−6	13	59	13.36	+11.51	2.28	T.	11	12	2	17	s.	H. E. Dean.
Eldon	Miller	934	15	32.0	.....	64	25	−12	13	55	3.01	+0.93	0.90	1.5	12	7	9	15	s.	Edward H. Shepherd.
Fruit City	Reynolds	1,150	3	37.7	....	65	5+	2	13	48	13.53	......	1.90	T.	13	6	15	10	s.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	33.2	−1.1	65	1	−7	13	39	8.77	+5.85	3.05	2.5	14	8	5	18	s.	A. C. Leach.
Goodland	Iron	1,000	11	34.8	+0.8	64	1	1	14+	41	12.38	+9.36	3.67	T.	10	13	0	18	s.	F. M. Adams.
Hollister	Taney	1,000	7	39.8	.....	72	5	0	13	40	13.20	+10.60	4.00	0	12	10	0	21	sw.	W. P. Clapmann.
Houston	Texas	1,280	23	34.6	+0.6	63	1	−4	13	48	10.13	+7.95	3.65	0.4	12	9	2	20	s.	R. F. Harmon.
Ironton	Iron	925	38	35.4	+3.1	64	1+	−2	13	38	12.18	+9.17	4.65	2.5	14	7	5	19	sw.	W. H. Delano.
Koshkonong	Oregon	911	15	37.6	+0.4	66	5	1	13	53	9.02	+5.82	2.47	1.0	13	8	2	21	se.	R. M. Hitt.
Lebanon	Laclede	1,265	27	33.5	−0.1	66	5	−8	13	39	9.33	+6.84	2.70	1.0	14	6	6	19	s.	O. L. Weissgerber.
Lockwood	Dade	1,088	21	32.8	−1.3	63	5	−9	13	54	8.67	+7.23	2.38	2.2	11	11	4	16	ne.	C. S. Crow.
Mountain Grove	Wright	1,490	17	34.3	+0.1	62	1+	−5	13	38	10.92	+8.38	3.58	T.	13	7	3	21	se.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	36.2	+1.2	68	1	−7	15	38	14.12	+11.92	2.30	0	11	9	3	19	se.	J. R. White & Son.
Neosho	Newton	1,083	33	37.2	+2.1	67	4	−7	13	56	11.80	+9.44	2.30	1.2	13	11	4	16	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	32.8	+1.1	65	2	−7	13+	40	9.72	+7.41	2.61	1.0	11	9	9	13	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	33.8	+2.5	64	5	−8	13	50	9.31	+6.65	2.63	0.8	13	10	3	18	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	30.0	.....	65	5	−14	13	41	5.07	......	1.54	4.5	10	9	2	20	nw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	E. F. Hirni.
Clinton	Henry	800	29	31.2	−1.5	62	24	−4	13	36	8.01	+5.97	2.35	6.0	10	9	8	14	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	26.8	−0.5	63	4	−14	13+	41	6.65	+5.10	1.86	9.2	11	4	2	25	ne.	A. J. Sharp.
Lamar	Barton	964	35	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	E. H. Adams.
Lamonte	Pettis	863	27	29.0	.....	64	5	−13	13	44	8.27	+6.47	2.15	0	14	8	7	16	s.	J. Ed. Hall.
Marshall	Saline	779	25	28.8	+0.6	64	4	−14	13	35	7.22	+5.41	1.27	4.0	14	16	3	12	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	32.0	....	64	5	−9	13	38	5.02	+3.44	2.70	2.0	6	12	2	17	se.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	W. E. Mathews.
Warrensburg	Johnson	883	37	29.4	+0.7	63	24	−14	13	37	7.00	+5.21	2.40	9.5	17	8	7	16	nw.	Geo. H. Collins.
Warsaw	Benton	883	11	33.4	+0.2	65	5+	−10	13	38	8.55	+6.29	1.76	5.0	13	9	10	12	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	....	....	....	....	....	....	5.90	......	1.92	4.6	14	9	0	22	nw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	28.2	0.2	62	5	−13	13	34	6.70	+4.88	3.00	7.0	9	16	5	10	nw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	23.4	−1.3	59	24	−20	13	40	3.28	+1.80	1.00	4.5	9	10	7	14	sw.	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	4.78	+2.39	1.90	5.0	12	9	1	21	......	Hecey O. Dupy.
Conception	Nodaway	982	31	22.1	−2.9	58	4+	−24	13	51	1.58	+0.56	0.52	5.0	8	8	10	13	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	23.0	−1.8	56	24	−21	13	39	3.01	+2.05	0.64	7.0	8	11	3	17	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	27.4	+1.2	62	5	−14	13	48	5.52	+4.39	2.24	11.1	16	7	10	14	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	25.8	−0.4	62	4	−20	13	34	4.55	+3.20	1.87	4.5	7	10	3	18	nw.	J. F. Sharp.
Lexington	Lafayette	813	34	27.4	−0.1	62	1	−15	13	28	6.22	+4.65	1.73	8.7	11	8	0	23	s.	J. W. Keithley.
Liberty	Clay	864	27	25.8a	−2.9	61	5	−16	13	44	4.59	+3.18	1.89	8.0	10	11	6	14	nw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	19.2	−3.6	59	4	−22	13+	39	2.91	+1.73	0.70	9.0	11	8	6	17	nw.	J. R. Brink.
Oregon	Holt	1,113	60	22.4	−1.4	59	4	−21	13	46	2.02	+0.55	0.79	10.0	8	12	2	17	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	24.2	....	61	4	−19	13	49	2.56	+1.49	0.86	5.6	13	9	7	15	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	21.1	.....	60	4	−22	13	42	1.37	......	0.42	3.2	5	13	5	13	sw.	John F. Frazier.
Trenton	Grundy	812	21	25.2	−1.9	60	5	−18	13	40	3.65	+2.25	1.70	6.0	10	9	4	18	se.	W. H. Estes.
State means and extremes			..	31.6	+0.7	72	3+	−24	13	59	7.36	+5.16	4.65	3.4	12	9	4	18	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

* Also on other dates. **Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for January, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ille	Missouri	.20	.06			.04	T.	.09			T.	.12	1.40	.06			T.	T.			.08	1.00	.10				T.	1.08	.02	.52	.13	.44	5.34
vick	Grand	.45						.11			T.	T.	1.07				T.			T.	.27	1.42					.12	1.77	T.	.28	T.	.48	5.97
bia***	Missouri	.35			T.	.01	.15			T.	.05	1.17	.70				.01			.09	.92	.24				T.	1.27	.61	.20	.29	.74	T.	6.80
e	do	.35				.07	.20					.64	1.41				.05			.02	1.15						.50	1.08		.63	.50		6.60
	do	.58				.02		.17			.14	1.75	.05				T.			.06	T.	.45					T.	1.54	.57	T.		.65	5.98
	Mississippi	.60								T.		.13	.31							.10	1.54						1.93			.34	.24		5.19
bal***	do	.30				.30	.16			T.		1.07	.87			T.	T.			.16	.50	.24					.25	.57	.43	.93	.61	.01	6.40
nn	Missouri	.19	.18		.01		.08	.34			.04	.32	1.52	.18				.02			.09	.07	.01					.84	.01	.60	.56	.77	5.83
on City	do	.22						.27			.10	.70	1.70								.05	.55	.10					1.75		.60	.25	.60	6.89
ville	Chariton				.07		.20					T.	1.27						.20		1.42							1.75	.35	.02	.37		5.65
ma	Mississippi	.55						T.	.15			1.63	.02				.02			.05	.70	.62						1.10	.10	1.30	.95	.25	7.44
	Chariton	.42						.19					1.30	.15							.26	1.26					T.	1.92		.66		.51	6.76
	Mississippi	.20	.09			.01	.01	.03			.02	.05	1.80	.25			T.	.05		T.	.05	.80	.03					1.38	.03	.54	.12	.65	6.11
ld	Meramec	.12			T.	T.	T.	.24			.35	1.36	1.57				T.			.08	T.	T.						.64	.04	1.00	2.16	.81	8.37
ra	Mississippi	1.14				.24		.18				1.55		1.75						.15	1.14							1.35		.67		.12	8.29
nerine	Grand	.76					T.	.07		T.		.05	.31							.06	.19	1.57				T.	1.00	.84	.12	.34	.29	T.	5.60
arles	Missouri	.74			T.	T.		.21			.20	.66	1.91							T.	T.	T.						.50	.40	1.09	2.37	T.	8.08
is (1)***	Mississippi	.08			.01	.05	.12	.01		T.	.36	1.81	1.58		T.	T.	.02			.06	.01	.02						.43	.31	1.09	2.47	T.	8.53
is (2)	do	.14			.02	.06	.15	T.		.01	.29	1.87	1.33			T.	.09			.02	.13	.03					T.	.55	.26	1.36	2.74		9.05
ville	do	1.25						.14		.05			1.63							.15	.40	1.90					.22	.40	.95	.60	.42		8.11
ville	Grand	.60				T.					.03	T.	.25	.20							.12	1.35					.10	.76		.35	T.	.37	4.13
na	Mississippi							.75					1.50							.15				1.45									3.85
nton	do	.22			.01			.30			.05	.22	2.40	.26			T.			T.	.08	.08	.02					.83	T.	1.25	.80	.91	7.48
east Lowlands.																																	
irardeau	Mississippi	1.40	.50					.60			.10	.10	.30	.70							.05	.05	.40					.05	.70	1.90	1.80	2.10	10.75
ell	do	1.75					.10					.40	.55								.35	1.00						.90	.70	.10	.70	2.70	9.25
ersville	do	1.35	.10			T.	.10	2.00		T.	T.		.30		T.	T.	T.				.10	.72	.20				T.	.75	.56	T.	T.	2.77	8.95
ian	Black	1.50				.12	1.15			T.	T.	.25	.38				.10					.60					T.	.70	.85	1.90	.60	.50	8.65
n	Mississippi	.23				.07	.46				.05	.52	.56								.04						.02	.60	1.85	1.60	1.18	.85	8.03
Hill	do	1.40					.35		.45			.45	.52															.80	1.30	1.40	2.00	.70	9.37
adrid	do	2.03	.38				.20	1.10				.60	.12	.31				.04				.10	.60					.05	.95	.80	.03	3.20	10.51
(near)	do	.40					.01				.75	.68	.40									.60	.10					.85	1.10	1.70	2.75	.40	9.74
Bluff	Black	1.30	.20			.25		.90				.25	.30	.26			T.	T.					.55					.90	1.20	1.15	.90	1.15	9.31
on	Mississippi	1.35	.05			.02		.35	.02		.01	.20	.68								.05	.30	.27					.75	1.09	1.25	.65	2.25	9.29
Ill.***	do	.93				.03	.30	.06		.02	.08	.35	.28	T.	T.	T.	T.			T.	.01	.55	.01			T.	T.	.46	.80	1.44	2.26	.53	8.11
k Plateau.																																	
ton	Gasconade	.65	.20					.06			.10	.22	1.55	.24				T.			.05	.12						1.35	.11	.31	1.47	.47	6.90
l	Osage																																
ree	Black	1.20					.24	.17				.18	.65									.50						1.12	1.09	1.12	1.95	.15	8.37
r	Osage	.43			.02		.05						1.90								.21		1.15				3.15			.40	.20	.30	7.81
lle	White																																
r	Gasconade	.96					.02	.70	.31			2.10	.27																.36	1.16	1.47		7.35
	Neosho	1.50				.34						1.66	2.18				T.				.12	2.28					.97	2.01	.50	.17	1.63		13.36
	Osage	.20					.10	.15			.10	.35	.26								.08	.32						.90	.02		.48	.05	3.01
ity	Black	1.05				1.10		.75	.75		1.55	.30	.75									.70						1.90	1.05	1.20	1.83	.60	13.53
	Meramec	.92			.03	.12	.20	.07				1.01	.04				T.				T.	.11					.01	.95	1.22	.76	3.05	.28	8.77
and	Black	2.00				.10					.50		1.50									.90						.91	1.40	1.25	3.67	.15	12.38
ter	White	.40					1.00		.20			.20	2.00								.10	.40					.50	4.00	.40	1.10	2.90		13.20
on	Gasconade	.35			T.	T.	.02	.02		T.	.43	.51	1.65			T.	T.			T.	T.	.20					T.	1.20	.70	1.30	3.65	.10	10.13
n	Mississippi	.20	.60			T.	.10	.50	T.		.03	.22	.70	T.			T.	T.			.03	T.	.40					1.15	.25	2.35	4.65	1.00	12.18
onong	Black	.83					.55			.23	.02	.33	.59				.05					.48				T.		1.28	1.00	2.47	1.04	.15	9.62
on	Osage	.45	.70		T		.05	.17			.03		2.70								.12	.20	.01					2.20	.20	1.10	1.00	.40	9.33
ood	do	.85					.05	T.			.13	.46	1.63								.05	1.67					.08	2.38	.46		.91	T.	8.67
ain Grove	White	.66	.40		T.	.05	T.	.31			T.	.07	2.21	.08								.21	.46					1.85		.21	3.58	.83	10.92
Vernon	Neosho	1.00									.10	1.76	1.95							T.		1.55	2.10				.80	2.30	.30	1.01	1.25		14.12
o	do	1.40					.06				.17	1.65	2.11	.02			T.			T.	.12	2.03					.35	2.30	.47	.12	1.00		11.80
	Meramec	.32	.18				T.	.40			T.	.09	2.61								.15	.06						1.59		1.35	2.51	.46	9.72
ield***	White	.64			.01	T.	.17	T.		T.	.04	1.89	.82				T.			T.	.10	1.06					2.08	.39	.54	.17	1.40	T.	9.31
land	Osage																																
west Plain.																																	
t	Osage	.11				T.	.15	T.		.16	T.	.13	1.07				T.			T.	.27	1.12				T.	1.54	.30	T.	.22	T.		5.07
on City	do																																
o	do			.20			.20					.53	1.00							.20		2.35					.65	1.60	.60	.68			8.01
onville	do	.35						.50				.05	1.30				T.				.07	1.86					.09	1.39	.03	.56		.45	6.65
	Neosho																																
ite	Missouri	.65			T.		.37	.15		T.	.15	.80	2.15				T.			.10	.10	1.00				T.	.65	1.05	.35	.30	.45		8.27
all	do	.20					.05	.60				.45	.25	.10			T.			1.20	.35	1.27					.51	1.12	.10	.60	.42		7.22
a	Osage												.69								.31	2.70				.05	.52		.75				5.02
a	do																																
nsburg	Missouri	.07				.02	.30	.11			.02	.60	1.08				.01			.02	.25	1.05				T.	1.34	1.06	.27	.21	.57	.02	7.00
w	Osage	.86			T.	T.	T.	.13		T.	.11	.68	1.76				T.			T.	.27	1.09					.29	1.53	.45	.28	.97	.13	8.55
ly	Missouri	.39				.09		.29				.05	.77	.18			T.				.17	1.44	.04				.08	1.92	.04	.37		.07	5.90
west Plateau.																																	
n	Grand	.25					.10							.20	.25					.40	3.00						1.50		.50		.50		6.70
ny	do	.45			T.		T.		T.	T.		T.	.03			T.				.10	.10	1.00				T.	.72	.45	T.	.28		.15	3.28
othe	do	.60						.05				.10	.40	.10							.10	1.90					.12	.78	.02	.33	.28		4.78
ption	Missouri	.52					T.	.05		.04		.10	.30			T.				T.	.15	.37				T.	T.	T.		T.	.05		1.58
City	Grand	.60							T.			T.		.30	.20					.20	.16	.56					.64	.35	T.	T.	T.	T.	3.01
s City***	Missouri	.04					.45	.03				.16	.35				.02			.15	2.02	.22				.08	1.36	.10	.17	.07	.29	.01	5.52
r	Grand	.52						.07				T.	.17							.30		1.87					.26	1.00		.20		.16	4.55
gton	Missouri	.39						.43				.29	.70	.05							.15	1.73					.06	1.50		.47	T.	.45	6.22
y	do	.28					.35					.42					T.			.14	T.	1.89				**	.71	.40		**	.40		4.59
ille	do	.70							T.	.02		T.	T.	.35			.05				.15	.27					.10	.67	T.	.25	.25	.10	2.91
n	do	.06					.04					.05	.35							.05		.43					.79					.25	2.02
eph***	Missouri	.03			T.	T.	.04			.02		.12	.16			T.	T.			.13	.86	T				.02	.67	.15	.18	.06	.12	T.	2.56
	do				T.				T.			T.	.15									.15				T.	.40		.42		.25		1.37
m	Grand						.06			.02	T.	.11	.09							.21	1.70	T.				.21	.76	T.	.22	T.	.27		3.65

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

** Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for January, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	61	45	48	62	40	23	31	43	52	38	33	21	16	23	36	12	19	25	37	49	52	50	55	61	47	48	29	34	35	27	17
	Minimum...	35	26	23	23	39	9	11	9	12	37	24	8	-15	-12	-12	4	-2	1	10	18	36	29	35	30	36	28	25	11	10	17	15
Columbia	Maximum...	62	42	48	61	63	21	29	38	49	51	37	34	0	20	34	11	18	23	32	55	57	52	54	62	60	63	56	33	37	37	27
	Minimum...	31	28	25	40	16	12	13	11	32	29	28	6	11	-2	11	2	0	13	14	32	39	31	35	37	39	39	18	17	26	23	12
Fayette	Maximum...	60	41	46	60	63	27	25	36	55	40	32	30	-5	15	30	8	13	21	30	47	53	53	51	60	59	56	50	30	32	26	18
	Minimum...	45	29	20	28	10	8	8	7	31	32	30	-11	-15	-6	9	-2	-1	12	9	30	36	29	30	43	31	32	12	11	21	18	8
Hannibal	Maximum...	61	43	45	60	61	16	28	40	49	50	34	33	-2	15	32	11	16	20	32	50	55	52	52	58	58	60	57	32	[illegible]	30	26
	Minimum...	32	28	25	39	11	7	10	8	34	26	25	-5	-13	-8	11	0	-2	11	10	32	42	32	31	35	34	34	17	14	25	22	7
Jefferson City §§	Maximum...	62	42	50	64	65	22	28	41	55	48	42	28	5	26	35	12	20	26	41	55	57	56	57	61	63	65	35	35	40	32	24
	Minimum...	34	26	24	24	47	13	14	3	4	37	29	22	10	-9	0	7	0	2	14	20	40	31	30	28	39	40	32	15	21	25	21
Macon §§	Maximum...	61	42	46	62	31	17	29	40	52	38	32	17	13	21	33	10	19	21	37	50	53	52	51	59	49	53	30	32	35	26	19
	Minimum...	34	25	23	22	33	6	7	9	10	34	21	17	-15	15	-9	3	-2	-2	9	13	36	36	30	33	35	39	30	11	12	17	15
Mexico §§	Maximum...	60	43	47	62	61	19	29	40	41	41	34	26	0	21	34	11	17	25	38	50	55	52	54	60	60	60	35	30	38	35	24
	Minimum...	33	26	23	23	32	10	10	10	13	35	25	26	-12	-12	5	5	-3	-2	1	13	38	30	29	33	35	35	34	26	26	21	20
Oakfield	Maximum...	65	61	47	64	63	26	33	40	41	52	36	47	10	19	31	30	21	29	31	55	58	54	51	60	63	64	65	31	48	42	32
	Minimum...	36	28	27	36	24	12	17	12	30	35	29	4	-7	-4	14	7	-1	11	13	28	48	33	32	35	48	50	26	22	29	32	18
St. Catharine	Maximum...	59	46	44	58	57	23	32	35	43	48	28	30	1	10	35	17	18	23	26	38	53	50	49	57	52	45	48	26	34	25	21
	Minimum...	34	22	21	35	20	5	14	10	29	27	17	-4	-17	-13	10	3	-6	19	5	24	36	26	31	34	26	25	16	9	24	15	11
St. Louis (1)	Maximum...	65	43	47	61	60	23	31	41	46	52	47	48	10	19	32	20	18	29	33	53	58	51	51	59	63	61	63	35	52	36	33
	Minimum...	40	32	32	36	18	13	20	22	29	33	31	0	-4	-1	18	4	1	14	18	33	45	38	36	37	47	48	28	25	35	35	17
Unionville §§	Maximum...	58	43	46	56	28	16	34	36	48	34	25	16	-10	15	24	4	18	20	34	48	52	51	47	58	44	46	25	32	34	16	12
	Minimum...	34	22	18	22	28	0	2	15	17	32	15	10	20	-20	-18	-2	-7	-6	4	14	34	28	30	32	37	22	21	[illegible]	8	[illegible]	6
Warrenton §§	Maximum...	60	42	47	61	60	20	29	40	48	42	43	32	4	22	31	9	18	24	40	55	56	49	52	59	60	61	55	35	45	31	23
	Minimum...	31	27	26	27	40	10	10	13	9	32	27	29	-9	-10	-4	6	-2	-3	11	15	49	31	31	33	25	47	49	20	20	25	21
Southeast Lowlands.																																
Cardwell	Maximum...	70	66	72	64	63	48	46	42	45	62	66	69	30	26	34	35	27	33	38	52	58	57	58	62	66	66	67	60	71	69	66
	Minimum...	48	40	32	32	45	23	31	21	31	43	41	30	9	11	22	19	10	17	18	35	37	42	32	30	49	48	56	39	41	49	35
Caruthersville	Maximum...	71	63	57	61	61	44	33	41	43	58	65	62	32	28	35	35	24	32	37	52	56	58	58	61	63	65	66	55	71	70	65
	Minimum...	49	43	32	34	44	30	28	27	33	42	42	32	11	13	19	19	16	16	18	35	42	45	35	35	49	50	52	46	42	52	36
Doniphan	Maximum...	66	63	50	60	62	43	32	38	41	62	55	65	21	24	32	32	26	31	35	50	57	56	52	60	62	62	65	52	64	63	48
	Minimum...	41	34	25	27	41	24	23	17	26	26	37	19	4	6	18	15	5	16	14	32	38	35	27	25	44	48	50	32	35	38	30
Jackson	Maximum...	64	62	55	59	60	50	40	42	40	55	42	64	25	35	31	30	25	34	31	50	54	57	55	58	62	65	66	50	62	62	45
	Minimum...	32	33	28	33	32	19	20	18	29	39	37	20	4	4	18	13	4	5	13	32	42	36	27	32	45	45	46	31	36	25	28
Marble Hill	Maximum...	62	63	54	62	62	52	50	42	38	48	40	60	20	22	30	30	34	30	36	60	54	56	55	60	65	65	63	53	60	66	50
	Minimum...	35	31	24	34	35	35	25	18	25	40	36	20	3	3	18	12	10	20	24	30	34	38	22	25	45	48	49	30	32	35	30
Poplar Bluff §§	Maximum...	61	67	52	52	62	62	29	32	43	56	65	67	50	22	24	32	21	28	35	50	57	57	58	58	61	66	66	63	54	67	49
	Minimum...	40	35	28	28	35	24	23	19	23	34	36	41	4	6	8	11	5	6	14	30	37	35	25	26	29	46	50	33	37	39	35
Ozark Plateau.																																
Birchtree	Maximum...	64	58	52	60	63	....	33	40	38	58	45	60	17	26	30	27	24	....	31	53	55	53	53	60	60	57	63	36	54	47	40
	Minimum...	50	28	26	33	33	....	21	17	27	36	34	7	-3	2	7	10	1	....	15	28	45	33	28	32	40	47	36	27	32	33	22
Cassville	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum...	62	45	51	61	63	27	26	41	48	55	44	50	12	23	37	22	21	23	41	54	57	54	54	62	64	63	55	32	38	30	31
	Minimum...	37	25	24	37	27	13	14	6	27	34	30	-5	-12	-3	11	5	0	11	12	32	47	32	28	33	42	37	20	17	24	24	14
Fruit City	Maximum...	64	60	53	58	65	45	33	41	38	55	40	63	16	25	29	29	29	31	32	53	55	53	55	60	60	59	65	40	55	55	49
	Minimum...	39	42	31	35	32	29	20	20	26	38	37	15	2	5	18	10	10	16	24	30	42	38	35	33	41	45	58	28	32	34	25
Gano	Maximum...	65	56	53	60	56	27	30	46	38	52	44	41	7	22	30	29	19	27	31	51	55	52	53	59	60	60	63	32	55	46	31
	Minimum...	42	25	24	38	27	15	10	7	24	37	33	4	-7	-1	18	8	-1	10	11	28	47	31	30	26	46	48	28	22	31	29	20
Hollister	Maximum...	56	54	62	70	72	44	36	40	40	50	58	48	24	32	40	24	24	32	36	60	66	62	60	58	68	60	40	58	44	40	38
	Minimum...	48	30	22	56	41	24	26	32	34	42	48	24	0	8	24	12	8	22	20	54	50	32	34	30	34	40	38	32	34	36	36
Ironton §§	Maximum...	64	48	51	59	61	22	32	43	40	53	63	44	14	24	30	14	24	31	33	53	58	53	55	61	[illegible]	64	58	34	56	40	31
	Minimum...	37	29	23	31	53	16	17	5	25	36	35	38	-2	1	17	11	0	12	8	28	44	32	21	29	43	44	54	27	32	33	30
Lebanon §§	Maximum...	60	50	54	65	66	22	32	42	52	44	54	32	12	26	33	12	23	33	41	56	57	58	56	60	61	60	40	45	45	27	24
	Minimum...	40	25	25	26	45	17	17	17	20	35	34	30	-8	-1	1	9	2	2	15	22	52	37	31	32	37	47	37	21	21	25	22
Mountain Grove §§	Maximum...	62	49	51	61	62	26	31	48	51	53	60	34	13	28	31	15	28	30	34	56	53	51	54	57	62	60	55	45	54	46	28
	Minimum...	37	25	25	28	37	23	18	18	20	36	37	31	-5	-4	5	10	2	7	14	18	35	31	30	32	30	42	46	27	27	30	26
Neosho	Maximum...	65	58	58	67	66	32	32	43	53	59	59	58	13	31	42	39	24	30	34	59	61	59	58	63	61	65	58	37	45	32	31
	Minimum...	52	25	29	36	30	22	24	27	32	41	39	2	-7	5	24	8	6	13	17	30	52	26	25	40	52	53	20	20	25	22	18
Rolla §§	Maximum...	65	46	53	60	62	20	31	43	52	49	52	32	10	24	32	10	21	30	41	58	55	53	54	60	60	63	50	45	48	32	24
	Minimum...	37	26	26	27	44	15	15	10	14	33	33	31	-7	-7	0	9	-4	0	14	18	40	31	30	32	38	47	50	22	24	29	24
Springfield	Maximum...	61	45	51	62	64	27	30	37	56	57	56	47	7	24	36	17	19	26	32	53	57	53	50	62	59	61	55	37	41	35	27
	Minimum...	36	26	32	39	22	19	21	22	30	36	36	-3	-8	3	17	6	4	14	18	32	44	31	36	36	46	51	21	22	25	26	11
Southwest Plain.																																
Amoret	Maximum...	64	48	51	63	65	28	29	34	51	59	39	36	4	20	38	23	23	30	40	41	55	55	54	62	57	48	46	31	35	26	24
	Minimum...	36	22	23	37	24	13	18	13	29	35	29	-3	-14	-4	16	3	-1	11	16	29	36	27	32	34	27	26	12	11	17	15	12
Clinton	Maximum...	60	49	52	60	60	25	30	42	45	48	58	36	4	23	39	23	21	28	38	44	58	52	55	62	55	51	41	33	33	32	27
	Minimum...	40	25	25	40	25	15	19	10	20	30	30	0	-4	0	18	0	3	12	20	28	42	30	32	34	33	31	19	15	20	20	20
Harrisonville §§	Maximum...	59	43	49	63	37	18	26	36	54	40	32	6	-3	24	31	10	20	23	37	49	52	50	51	60	54	45	16	34	33	22	18
	Minimum...	35	25	23	22	37	13	18	22	22	35	26	6	-14	-14	-3	5	-2	-2	20	20	36	29	29	33	47	32	15	10	12	17	18
Lamar §§	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lamonte	Maximum...	61	59	51	60	64	25	30	39	51	56	34	32	0	25	32	17	22	24	32	42	57	54	53	63	52	42	40	32	37	28	25
	Minimum...	30	29	23	35	25	12	12	-5	26	34	25	-2	-13	-6	14	4	-3	10	7	30	39	27	28	36	24	30	28	12	15	18	14
Marshall	Maximum...	61	50	48	64	59	24	28	34	46	55	35	32	-3	15	32	19	16	22	30	41	54	51	53	61	49	50	49	29	35	28	27
	Minimum...	35	25	24	37	50	9	15	4	29	34	25	-3	-14	-5	10	4	-2	10	9	28	37	27	30	34	30	29	16	12	22	18	14
Warrensburg	Maximum...	61	47	52	60	59	24	29	41	55	55	33	33	0	16	33	18	21	29	31	41	58	54	54	63	54	47	45	31	31	26	23
	Minimum...	39	25	27	38	23	11	17	11	30	32	26	-4	-14	-5	12	4	-1	12	14	29	37	29	34	37	28	29	15	12	19	17	14
Warsaw	Maximum...	62	53	52	62	65	27	32	40	55	55	42	38	5	24	40	29	22	32	33	53	59	53	55	64	60	65	57	33	43	32	30
	Minimum...	43	27	21	40	27	15	20	9	28	42	33	0	-10	-1	19	7	3	12	18	32	41	27	25	48	42	35	19	17	25	19	17
Northwest Plateau.																																
Avalon	Maximum...	60	51	46	59	62	33	34	36	43	43	30	27	5	14	32	17	20	22	27	38	53	54	51	60	55	44	40	24	34	21	20
	Minimum...	40	21	25	43	28	9	18	10	34	30	20	5	-13	-5	11	5	3	10	17	27	38	30	30	27	27	27	13	12	21	15	10
Grant City	Maximum...	54	44	43	55	55	30	35	32	43	45	25	22	2	12	17	6	20	18	27	38	48	51	51	56	51	34	32	22	31	15	16
	Minimum...	34	22	21	33	16	3	16	9	24	23	13	-11	-21	-17	6	-1	-6	5	15	26	34	29	31	33	18	17	4	-1	9	4	5
Kansas City	Maximum...	60	45	47	62	62	18	28	32	54	54	30	19	1	21	31	10	22	26	34	45	54	53	52	60	51	45	31	32	33	20	18
	Minimum...	30	26	34	42	14	10	16	16	31	26	19	-11	-14	-7	5	3	-1	14	19	34	40	33	38	40	23	24	7	5	12	9	9
Kidder §§	Maximum...	57	47	48	62	26	28	29	34	52	31	25	5	-4	20	18	6	20	20	35	49	52	51	51	59	30	33	13	32	29	18	13
	Minimum...	40	22	24	47	24	7	28	15	33	33	19	3	-20	-14	15	3	-4	12	17	34	47	30	33	35	30	29	10	9	29	12	9
Lexington §§	Maximum...	62	45	48	60	39	18	31	34	47	40	31	10	1	13	31	12	20	27	30	40	54	53	52	61	48	42	18	26	33	22	17
	Minimum...	34	25	26	38	38	9	15	9	27	39	24	9	-15	-6	12	2	0	12	13	26	36	30	34	37	46	26	17	9	25	15	15
Maryville §§	Maximum...	54	44	49	59	19	21	35	37	46	33	21	-4	-6	14	17	6	22	20	35	42	47	50	52	58	26	29	6	30	21	17	10
	Minimum...	28	21	20	20	19	3	6	14	16	30	13	-4	-22	-22	-16	-7	-6	-5	4	16	31	26	27	27	20	14	3	-3	0	2	2
Oregon	Maximum...	52	42	45	59	57	20	32	31	48	48	25	20	-9	11	16	8	20	20	30	37	47	47	51	56	51	29	25	25	27	17	14
	Minimum...	28	20	25	36	11	5	15	15	29	20	15	-12	-21	-14	3	-1	-6	8	10	27	31	26	34	36	14	16	1	-1	6	5	2
St. Joseph	Maximum...	57	43	47	61	58	20	31	31	51	49	24	10	-2	13	20	8	21	21	32	40	50	51	53	59	50	31	19	31	31	18	16
	Minimum...	29	24	26	38	9	8	17	16	31	24	10	-13	-19	-11	2	1	-2	12	16	32	36	30	38	39	18	19	2	2	8	8	5
Trenton	Maximum...	55	50	41	57	60	20	33	30	42	49	28	24	-4	10	23	41	19	18	27	39	51	48	49	54	52	36	34	25	34	18	18
	Minimum...	34	23	23	32	20	6	16	14	26	28	19	-7	18	-12	10	1	-3	10	9	26	34	30	31	33	24	22	13	6	16	11	8

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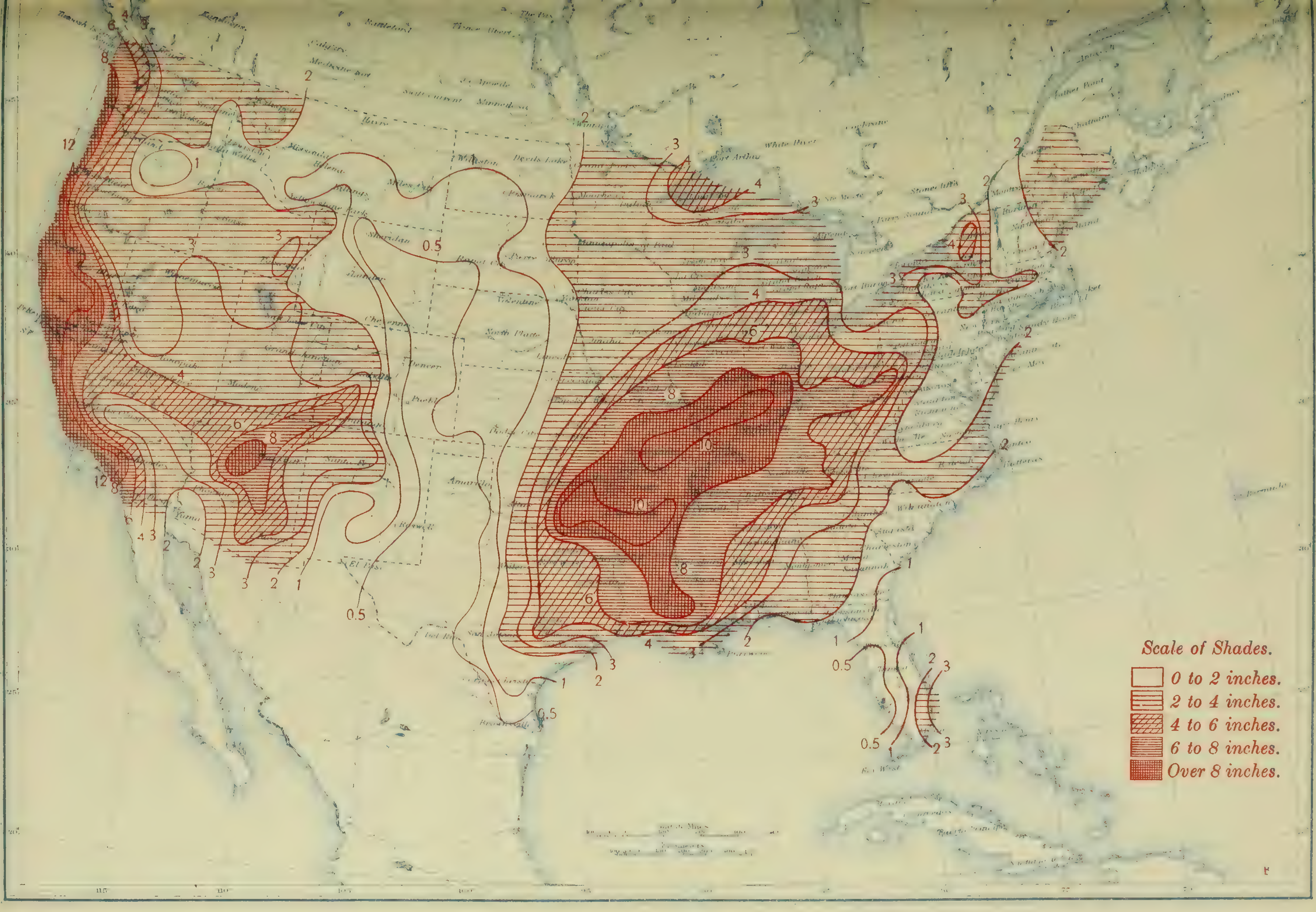
*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
0.5
1
2
3
4
6
8
10
12
Calgary
Medicine Hat
Swift Current
Winnipeg
White River
Port Arthur
Devils Lake
Williston
Helena
Missoula
Walla Walla
Sheridan
Cheyenne
Denver
Pueblo
North Platte
Omaha
Dodge City
Amarillo
Santa Fe
Roswell
El Paso
Charleston
Savannah
Hatteras
Key West
Bermuda

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

FEBRUARY, 1916

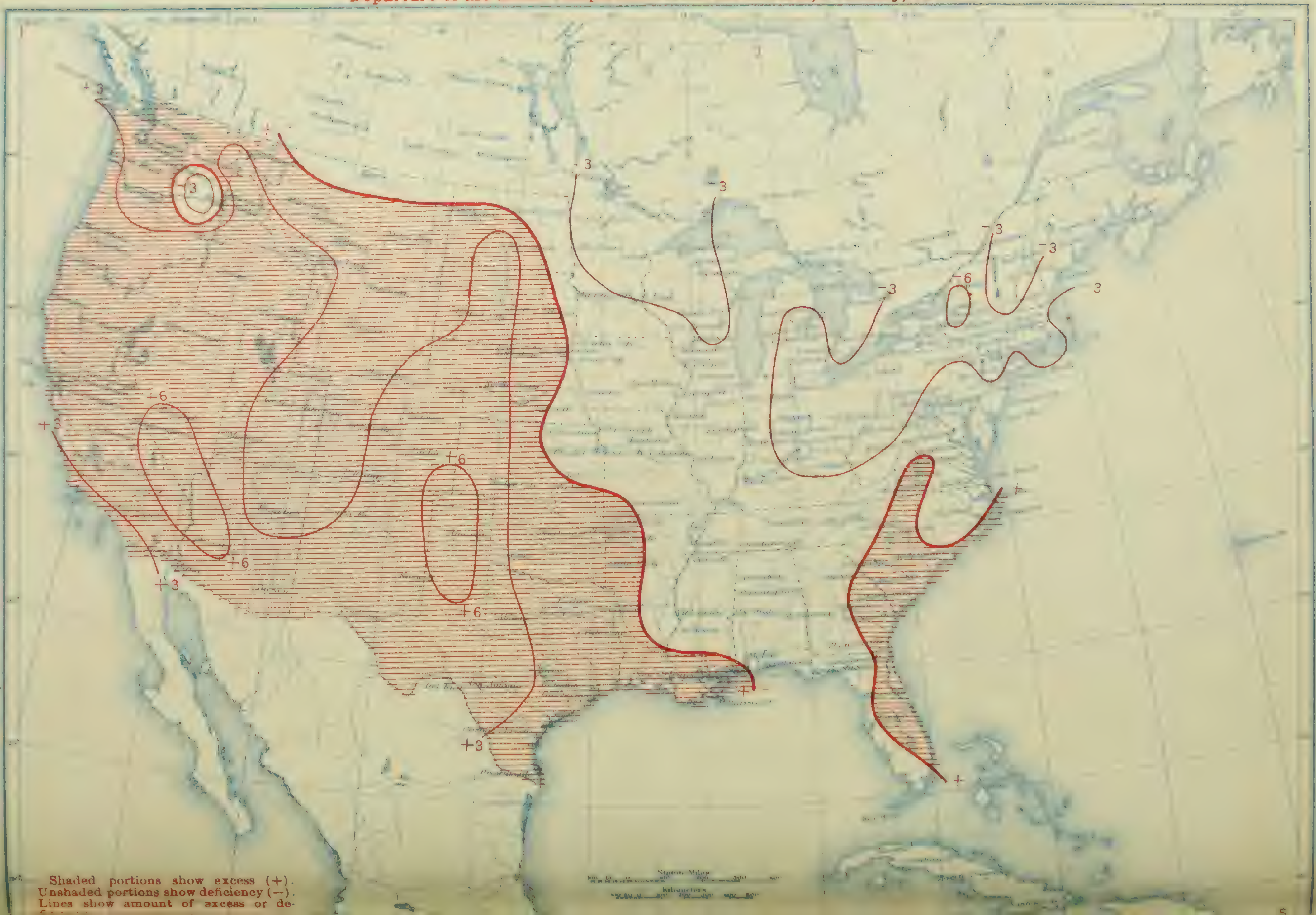
BY

GEORGE REEDER

SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 29 1916

Departure of the Mean Temperature from the Normal, February, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

XX. COLUMBIA, MO., FEBRUARY, 1916. No. 2

GENERAL SUMMARY.

e first half of February, 1916, was cold and mostly cloudy. nat formed in January, covered the ground in practically visions for more than a week, and in the more northern ies for a longer time. The latter half of the month, h, was mild, with much sunshine. Precipitation was ually light, but it was sufficient for present needs, as already was much moisture in the ground. At the close month cattle were in fair condition. Fruit was not ser- injured, and wheat was showing some slight improve-

e cold, raw weather that characterized the last days of ary, continued during the first two weeks of February, eginning with the 15th milder weather set in, and per- with remarkable steadiness till about the 25th, the last of the month being near normal. The mean monthly rature was practically normal in all divisions, the excess d during the latter half being just enough to offset the rature deficiency occurring in the first half of the month. emperature extremes, 12° below zero on the 2d and 78° e 20th, were well within the limits of previous years.

e precipitation of the month, a little more than half of it snow, was about 40 per cent of the normal. It was well buted as to time as well as geographically, occurring in ls of two or three days in each decade. Sleet fell on two

e snowfall was less than usual, but it was general, falling appreciable depth in nearly all counties. It was heavier e plains than in the plateaus, as a rule.

nder was heard on one or two dates, but the month was cally free from damaging storms of any kind.

TEMPERATURE.

e monthly mean temperature, 66 stations reporting, was . The mean departure from the normal for 52 stations g 10 or more years' record was plus 0.2°. The mean for ortheast plain was 26.8°, or 0.8° below normal; southeast nds, 38.8°, or 1.8° above normal; Ozark plateau, 35.7°, 8° above normal; southwest plain, 31.8°, or 0.1° above al, and northwest plateau, 27.0°, or 0.1° below normal. verage number of days with temperature 32° or lower was Six stations in the northeast plain and ten in the north- plateau experienced zero temperatures on an average of s.

HUMIDITY.

e mean relative humidity was about 76 per cent, which is ar from normal for the month of February. At Columbia ighest, as recorded by the hair hygrograph, was 97 per at 8 a. m. on the 17th, and the lowest was 35 per cent at m. on the 18th.

PRECIPITATION.

e average precipitation, 78 stations reporting, was 0.98 The departure from the normal for 67 stations having more years' record was minus 1.48 inches. The monthly ges and departures for the five divisions of the State were llows: northeast plain, 1.07 inches, deficiency 1.34 inches; east lowlands, 1.38 inches, deficiency 2.21 inches; Ozark au, 0.98 inch, deficiency 1.69 inches; southwest plain, 0.76 inch, deficiency 1.40 inches, and northwest plateau, 0.65 inch, deficiency 0.97 inch. The greatest local monthly precipitation was 3.00 inches, at Vandalia, and the least was 0.21 inch, at Tarkio. The greatest amount recorded in any 24 consecutive hours was 2.70 inches at Vandalia on the 9th-10th. The average snowfall was 5.0 inches, which is 2.0 inches below normal. The counties bordering on the Missouri River received the heaviest falls, as a rule. The St. Louis University reported 13 inches, the maximum fall.

The average number of days with 0.01 inch or more precipitation was 5.

WIND.

The prevailing winds were from the northwest. The average hourly velocity was 10 miles, which is practically normal. Fresh to strong winds occurred on one day only, the 26th.

SUNSHINE AND CLOUDINESS.

For a winter month, it was quite bright. The sunshine for the State, based on records of Kansas City, Columbia and St. Louis, was 58 per cent of the possible, or slightly above the normal for February.

MISCELLANEOUS PHENOMENA.

Fogs—9th and 11th. Halos, solar—3d, 4th, 5th, 8th, 9th, 10th, 15th and 18th. Halos, lunar—8th, 9th, 17th and 22d. Sleet—4th and 12th. Thunderstorms—12th and 22d.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

Stations.	Mean barometric pressure (sea-level)	Mean Relative Humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Max. velocity. Direction.	Max. velocity. Date.
Columbia	30.20	80	......	154	49	6,128	8.8	42	nw.	26
Hannibal	30.22	79	......	......	......	6,389	9.2	33	nw.	26
Kansas City	30.22	80	72	206	66	8,257	11.9	44	nw.	26
St. Joseph	30.23	86	73	180	58	5,852	8.4	37	nw.	26
St. Louis	30.20	82	72	178	57	8,699	12.5	41	nw.	26
Springfield	30.20	84	74	190	60	7,382	10.6	34	nw.	26
Cairo, Ill	30.18	76	69	......	......	7,382	10.6	39	nw.	26
Keokuk, Iowa	30.22	82	82	171	55	5,398	7.7	29	nw.	26

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	33.0	+2.0	73	−11	2.04	−0.28	.....	.....	7	.....	.....	.....
1889	29 3	−1.7	73	− 9	2.57	+0.25	.....	.....	7	.....	.....	.....
1890	35.5	+4.5	81	− 7	2.24	−0.08	.....	.....	7	.....	.....	.....
1891	32.7	+1.7	76	− 8	2.28	−0.04	.....	2.4	6	.....	.....	.....
1892	37.7	+6.7	71	2	4.15	+1.83	.....	.....	9	7	6	16
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30 8	−0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+3.8	74	−15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35 4	+4.4	78	− 9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	−32	2.17	−0.15	4.30	5 3	6	12	8	8
1900	26 2	−4.8	70	−16	3.92	+1.60	2 85	16 6	10	10	6	12
1901	28.1	−2.9	76	−19	1.63	−0.69	2.36	7.6	6	13	7	8
1902	24.0	−7.0	72	−17	1.50	−0.82	2.35	5 3	5	11	8	9
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	5.8	7	11	6	11
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	1.5	5	11	8	10
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	13.2	8	11	6	11
1906	33.7	+2.7	73	−13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34 8	+3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+4.6	78	− 7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+7.8	71	− 4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	−2.7	72	−24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	6 3	8	12	5	11
1912	28.3	−2.7	72	−12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	−1.7	78	− 9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+0.2	78	−12	0.98	−1.48	2.70	5.0	5	13	6	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Climatological data for February, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	...	....	....	....	....	0.58	−2.14	0.35	....	4	20	0	9	nw.	C. Randecker.
Brunswick	Chariton	652	36	28.4	0.0	62	22	2	2	31	0.75	−1.21	0.34	8.2	5	11	1	17	nw.	Louis Benecke.
Columbia	Boone	784	26	29.8	−0.4	63	22	5	2	28	0.81	−1.41	0.54	7.1	7	8	8	13	nw.	U. S. Weather Bureau
Fayette	Howard	725	31	26.9	−2.2	61	22	1	2	29	0.77	−1.33	0.40	7.5	0	....	...	...	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	31.2	+1.6	70	22	3	7	37	0.77	−1.37	0.70	6.0	2	9	10	10	nw.	Dr. C. W. Knapp.
Gorin	Scotland	700	27	....	.....	....	....	....	....	...	0.34	−1.82	0.15	3.2	4	9	5	15	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	27.4	−1.7	60	22	1	7	30	0.53	−1.14	0.32	8.2	5	10	10	9	nw.	U. S. Weather Bureau
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	0.92	−1.54	0.71	8.0	5	9	7	13	nw.	C. T. Mansfield.
Jefferson City	Cole	628	30	30.6	−0.2	69	22	5	2	36	1.10	−1.14	0.60	8.0	4	16	4	9	n.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	0.87	.....	0.50	8.7	4	....	....	....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	30.3	+2.2	67	22	−5	8	37	1.26	−1.23	0.75	12.0	7	13	7	9	n.	T. T. Farrell.
Macon	Macon	881	18	25.6	−1.3	59	22	0	2†	33	0.62	−1.53	0.34	11.0	4	8	10	11	nw.	John A. Cook.
Mexico	Audrain	797	38	27.6	−1.0	66	22	2	8	36	1.05	−1.45	0.63	10.1	7	15	3	11	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	33.0	+1.3	70	22	6	1†	34	1.16	1.42	0.59	6.3	4	12	6	11	nw.	E. F. Stones.
Palmyra	Marion	652	4	25.1	....	59	17†	0	7†	33	0.85	−1.39	0.34	5.3	4	10	8	11	nw.	W. B. Markell.
St. Catherine	Linn	914	3	26.3	....	59	22	−2	2	32	0.52	......	0.25	9.2	4	8	15	6	nw.	L. D. Baker.
St. Charles	St. Charles	614	38	31.8	+0.3	71	22	1	8	34	1.93	−1.05	1.09	5.5	5	11	9	9	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	32.8	−0.7	68	22	7	7	30	1.78	−1.08	0.66	5.7	7	9	8	12	nw.	U. S. Weather Bureau
St. Louis (2)	......do	578	4	31.6	.....	68	22	8	2†	30	2.18	......	0.44	13.5	10	11	7	11	nw.	St. Louis University.
Steffenville	Lewis	576	23	27.4	+0.7	62	22	0	2†	33	0.92	−1.12	0.50	6.5	4	13	7	9	n.	Frank Hall.
Unionville	Putnam	1,072	23	23.0	−1.0	60	20	−10	2	35	0.82	−1.17	0.62	6.5	4	11	6	12	n.	Geo. W. Davis.
Vandalia	Audrain	796	5	....	....	....	....	....	....	....	3.00	......	2.70	11.5	2	....	....	....	.....	C. B. Ellis.
Warrenton	Warren	865	25	24.0	−5.2	69	22	3	8	39	1.14	−1.40	0.61	7.8	6	8	7	14	nw.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	0.85	−1.54	0.30	1.0	6	10	5	14	w.	D. L. Albert.
Cardwell	Dunklin	225	5	41.8	....	74	17	18	2†	38	1.57	......	0.51	4.0	6	13	8	8	n.	F. E. Tate.
Caruthersville	Pemiscott	220	25	41.0	+3.6	72	17	18	3	35	1.68	−2.51	0.40	3.5	7	16	5	8	se.	H. E. Averill.
Doniphan	Ripley	440	11	38.6	+1.1	75	17	12	3	42	1.13	−2.67	0.40	2.0	5	17	2	10	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	37.6	+2.8	73	20	12	3†	37	1.64	−1.68	0.54	5.0	8	13	4	12	n.	L. M. Bean.
Marble Hill	Bollinger	420	24	35.4	+0.7	70	17	3	2	38	2.22	−1.45	0.74	5.5	7	13	7	9	n.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	....	....	....	....	....	....	1.77	−2.44	0.84	4.0	9	7	6	16	.....	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	.....	....	....	....	....	....	1.20	......	0.40	....	3	18	0	11	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	39.4	+1.2	76	17	13	3	38	1.27	−2.39	0.40	2.5	5	17	2	10	.....	Albert E. Cox.
Sikeston	Scott	328	15	39.4	+3.6	70	17	14	3	35	1.05	−2.58	0.27	2.2	6	20	5	4	n.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	37.2	−0.4	67	17	16	2	27	0.83	−2.61	0.38	1.3	6	10	7	12	nw.	U. S. Weather Bureau
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	1.46	−1.45	0.65	3.0	6	14	1	14	nw.	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	0.97	......	0.51	1.0	4	11	5	13	w.	Mrs. Nellie V. Houser
Birchtree	Shannon	1,200	22	37.1	+3.1	71	20	10	1†	39	0.98	−1.91	0.45	1.5	5	17	2	10	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	34.6	+1.2	73	21	5	2	41	1.11	−0.23	0.75	1.5	4	14	7	8	nw	A. C. Fink
Cassville	Barry	1,500	5	....	....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	34.9	....	68	22	3	1	37	0.51	.....	0.51	T	1	12	6	11	s.	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	37.1^{a}	+1.2	75	25	6	2	47	0.83	−1.15	0.45	1.6	4	20	0	9	s.	H. E. Dean.
Eldon	Miller	934	15	31.6	....	69	20	4	2	35	0.92	−1.80	0.40	4.0	5	12	9	8	n.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	38.2	.....	70	21	13	2	33	1.52	.....	0.80	1.5	4	20	6	3	n.	R. C. Walton.
Gano‡‡	Dent	1,250	12	34.6	+0.2	68	21	6	1†	40	1.26	−1.56	0.36	3.6	7	14	5	10	s.	A. C. Leach.
Goodland	Iron	1,000	11	35.2	+0.3	71	20	7	3	49	1.64	−1.46	0.40	4.0	5	16	3	10	n.	F. M. Adams.
Hollister	Taney	1,000	7	40.7	.....	78	20	10	2†	42	0.40	−3.02	0.20	2.0	2	17	0	12	se.	W. P. Chapmann,
Houston	Texas	1,280	23	37.1	+3.8	70	20	7	2	45	0.78	−1.70	0.25	2.0	4	15	3	11	nw.	R. F. Harmon.
Ironton	Iron	925	38	35.0	+1.6	71	17†	8	3	43	1.64	−1.83	0.45	4.5	7	9	6	14	ne.	W. H. Delano.
Koshkonong	Oregon	911	15	39.2	+2.4	75	17	11	2	37	0.96	−2.21	0.40	4.0	3	14	4	11	nw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	33.4	−0.3	75	21	4	2†	53	0.66	−1.48	0.20	1.0	6	15	5	9	n.	O. L. Weissgerber.
Lockwood	Dade	1,088	21	33.3	−1.7	60	21†	6	2†	30	0.65	−1.66	0.34	2.5	3	17	1	11	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	34.8	+1.0	70	21	5	2†	42	0.56	−2.08	0.34	2.5	4	13	2	14	nw.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	35.3^{g}	+2.0	73	21	6	2	37	0.21	−2.63	0.21	1.5	1	11^{g}	4^{g}	7^{g}	se.	J. R. White & Son.
Neosho	Newton	1,083	33	37.4	+1.1	74	21	8	2	45	0.84	−1.68	0.53	1.5	5	19	0	10	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	31.0	−4.1	67	22	4	1†	42	1.72	−0.72	0.57	4.2	5	14	6	9	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	34.0	+0.4	71	21	5	2	34	0.57	−1.81	0.20	3.2	9	15	6	8	nw.	U. S. Weather Bureau
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	....	......	....	....	....	....	....	....	.....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	32.8	....	72	21	2	2	42	0.50	......	0.29	0.2	3	12	7	10	ne.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	....	....	....	....	....	....	.....	.....	....	....	....	....	....	....	.....	E. F. Hirni.
Clinton	Henry	800	29	32.3	.....	68	21	5	2	36	0.90	−1.06	0.75	1.5	2	11	10	8	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	30.2	+0.7	63	22	5	1†	40	0.26	−1.91	0.16	3.0	3	9	5	15	sw.	A. J. Sharp.
Lamar	Barton	964	35	33.4	−0.7	76	21	6	6	46	0.29	−2.06	0.18	3.0	3	14	4	11	sw.	E. H. Adams.
Lamonte	Pettis	863	27	29.9	....	61	22	3	6	32	0.55	−1.47	0.30	8.5	3	11	10	8	nw.	J. Ed. Hall.
Marshall	Saline	779	25	30.0^{c}	+1.3	63	22	2	2	32	0.65	−1.31	0.30	6.5	4	8^{b}	9^{b}	10^{b}	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	33.6	....	76	22	5	2	42	1.40	−0.78	0.45	5.0	5	16	3	10	sw.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	.....	...	....	....	....	....	....	....	.....	W. E. Mathews.
Warrensburg	Johnson	883	37	30.8	−0.1	66	21	3	2	35	0.59	−1.50	0.36	7.2	4	12	7	10	nw.	Geo. H. Collins.
Warsaw	Benton	883	11	33.6	−0.7	72	21	6	2	46	1.85	−1.13	1.12	4.0	5	11	10	8	nw.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	0.63	......	0.41	6.5	5	12	6	11	nw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	28.2	+1.3	59	29	0	2	30	1.95	−0.33	1.05	9.0	4	12	13	4	nw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	24.6	−1.3	56	19†	−12	2	33	0.85	−0.53	0.35	8.5	4	11	8	10	nw.	M. H. Moulton.
Chillicothe	Livingston	....	1	....	....	....	....	....	....	....	0.35	−2.17	0.34	5.7	4	14	0	15	.....	Hocey O. Dupy.
Conception	Nodaway	982	31	26.1	0.0	56	21	−8	2	34	0.50	−0.74	0.20	5.0	3	11	9	9	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	21.7	−1.3	56	20	−9	2	33	0.80	−0.43	0.40	8.0	4	16	5	8	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	30.2	+0.3	62	16	2	2	30	0.57	−1.09	0.35	6.0	5	16	5	8	n.	U. S. Weather Bureau
Kidder	Caldwell	1,017	25	27.2	+0.8	56	19	−4	2	22	1.14	−0.45	0.75	8.3	4	13	8	8	nw.	J. F. Sharp.
Lexington	Lafayette	813	34	29.2	+0.6	64	22	1	2	31	0.59	−1.51	0.40	6.2	4	12	0	17	n.	J. W. Keithley.
Liberty	Clay	864	27	30.6^{a}	+1.7	62	16†	0	2	35	0.50	−1.14	0.30	5.0	2	12	12	5	nw.	W. C. Wilmot.
Maryville	Nodaway	1,160	25	23.4	+0.4	59	21	−10	2†	38	0.30	−0.93	0.20	3.0	2	16	6	7	nw.	J. R. Brink.
Oregon	Holt	1,113	60	25.7	2.3	56	21	−7	2	34	0.35	−1.38	0.15	4.8	4	18	4	7	nw.	Tom Curry.
St. Joseph	Buchanan	967	14	27.0	.....	58	19	−1	2	29	0.47	−0.71	0.21	4.7	3	12	8	9	nw.	U. S. Weather Bureau
Tarkio	Atchison	1,150	4	27.6	....	57	19†	−9	2	34	0.21	.....	0.10	3.2	3	15	6	8	nw.	John F. Frazier.
Trenton	Grundy	812	21	26.0	−1.3	52	19†	6	2	31	0.55	−1.14	0.25	6.0	3	13	3	13	n.	W. H. Estes.
State means and extremes				31.4	+0.2	78	20	−12	2	53	0.98	−1.48	2.70	5.0	5	13	6	10	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete report used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Pacific, R No. 1, of Dean, Anderson, of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for February, 1916.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ille	Missouri					.03	.35							.05										.11				T.	T.	.04			0.58
wick	Grand				T.	.09	.44							T.											T.		.02		.15	.05			0.75
bia***	Missouri	T.			.01	.54			T.	T.		T.	.02	.01	T.								.16	T.			.01		.06				0.81
te	do				.05	.20	.40						T.										.02						.10				0.77
	do					T.	.70						T.	T.									T.	T			T.		.07				0.77
	Mississippi				.13	.15							T.										.02				T.		.04				0.34
bal***	do			T.	.05	.26	.06						.05	T.	T.								T.	T.			T.		.11				0.53
ron	Missouri		T.		T.	T.	.71						.09	.05	T.									.02				T.	T.	.05			0.92
on City	do						.60						.05											.25			T.			.20			1.10
sville	Chariton				.05	.50							.02														T.		.30				0.87
ara	Mississippi		.02		.02		.75						.02	.30										.12		T.	T.		.03				1.26
	Chariton					.14	.34							T.	.04									T.						.10			0.62
o	Mississippi					.03	.63							.12	.02									.17			T.		.01	.07			1.05
ld	Meramec	T.		T.		T.	.59						.29	T.									T.	.23			T.		.05				1.16
ra	Mississippi				T.	.15	.04							T.										.32			T.		T.	.34			0.85
erine	Grand			T.	.20	T.	.25		T.				.02	T.									T.						.05				0.52
arles	Missouri						1.09						.12	.05									.57				T.		.10				1.93
is (1)***	Mississippi	T.	T.		T.	.40	.26					.17	.20	T.									.37	.26			T.		.12				1.78
is (2)	do	.01	T.		T	.42	.40					.11	.44	.02									.36	.27			.01		.14				2.18
ville	do				.20	.50							.07									T.	T.						.15	T.			0.92
ville	Grand				T.	.40	.22	.10						T.	T.														T.	.10			0.82
ie	Mississippi						.30				2.70															T.							3.00
aton	do		T.			.01	.61						.08	.10	T.									.27					T.	.07			1.14
east Lowlands.																																	
Girardeau	Mississippi						.30						.05	.15										.05	.20					.10			0.85
ell	do						.04			.12	.40		T.								.16			.34					.51				1.57
ersville	do		T.				.06			.05			T.	.71									.06	.40	.03				.37				1.68
an	Black					T.	.10					T.	.14	.14									T.	.40					.35	T.			1.13
	Mississippi					.35					.09	.54		.10									.25	.19					.12				1.64
Hill	do						.40						.74	.20	.20								.15	.18					.35				2.22
iadria	do		T.	.02		.02	.25			.10				.84	.02									.10	.11					.31			1.77
(near)	do						.40						.40										.40										1.20
r Bluff	Black						.25							.40								.30	.03							.29			1.27
on	Mississippi						.27						.25	.18									.05	.04					.26				1.05
Hl.***	do	T.	T.		T.	.06	.10		.01				.38	T.									.04	.12			T.		.12				0.83
k Plateau.																																	
ton	Gasconade					T.	.10						.65	.15										.46					.06	.04			1.46
ll	Osage						.51						.09	T.										.27					.10				0.97
rge	Black						.45						.20										.11	.12					.10				0.98
ar	Osage	.75											.05										.16					.15					1.11
tle	White																																
er	Gasconade																						.51							T.			0.51
	Neosho					.10							.08										.45					.20					0.83
	Osage				T.	.40	.12						T.										.31						.08				0.92
ity	Black						.80		T.				.55										.12	.05									1.52
	Meramec		.04				.36		T.				.17	.14									.26	.04			T.		.25				1.26
and	Black							.30							.40									.35					.40	.19			1.64
ter	White																							.20					.20				0.40
on	Gasconade	T.			T.		.23		T.			T.	.10	T.									T.	T.					.20	.25			0.78
uld	Mississippi		T.	T.			.45		T.				.15	.40	T.									.28	.08		T.	.03	T.	.25			1.64
onong	Black												.33											.23					.40				0.96
on	Osage		T.				.20						.10	.12										.12					.08	.04			0.66
ood	do				T.	T.								T.									.34					.01	.20				0.55
ain Grove	White						.05		T.				.34	T.										.04					T.	.13			0.56
t Vernon	Neosho					T.	T.					T.																	.21				0.21
o	do				T.	.06			.03			T.	T.										.53					.05	.17				0.84
	Meramec	T.				T.	.44						.33	.23	T.									.57					T.	.15			1.72
ield**	White	T.	T.		T.	.18	T		.08			.02	.04	.03									.01	.01				.10	.10				0.57
Sand	Osage																																
orest Plain.																																	
t	Osage				T.	T.	T.		T.			.01	T.										.29					T.	.20	T.			0.50
ton City	do																																
n	do																												.15	.75			0.90
sonville	do					.03	.16																						.07				0.26
r	Neosho	T.				T.	T.						.09		T									.02				T.	.18	T.			0.29
nte	Missouri				T.	.15	.30		T.			T.	T.	T.										T.					.10				0.55
all	do					.20	.30						.05	T.									T.		T.				.10				0.65
ia	Osage	.20																					.45	.45				.10	.20				1.40
ta	do																																
nsburg	Missouri				.02	.36	.10						T.										T.						.11				0.59
w	Osage			T.	T.	.77	.35						.18	T.									.43						.12				1.85
rly	Missouri					.05	.41							.02															.09	.06			0.63
orest Plateau.																																	
	Grand				.20		.50				1.05																	.20					1.95
ny	do			.05	.35	T.	.20						T.														T.		.25				0.85
othe	do					.09	.24																						.01	.01			0.35
ption	Missouri			.15	.15																								.20				0.50
City	Grand			.10	.40	T.	.10		T.			T.	T.																.20				0.80
s City***	Missouri				.02	.32	.03						.01																.19				0.57
t	Grand				.20	.75	.15																						.04				1.14
gton	Missouri					.02	.40																						.10	.07			0.59
y	do						.30																						.20				0.50
ille	do				.20		.10			T.				T.														T.					0.30
n	do				.15	.08							T.																.12				0.35
eph**	Missouri			T.	.21	.18						T.	T.	T.	T.								T.		T.		T.		.08				0.47
	do			.10	.02							T.															T.		.09				0.21
on	Grand			T.	.25	.21						T.	T.													T.	T.		.09				0.55

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

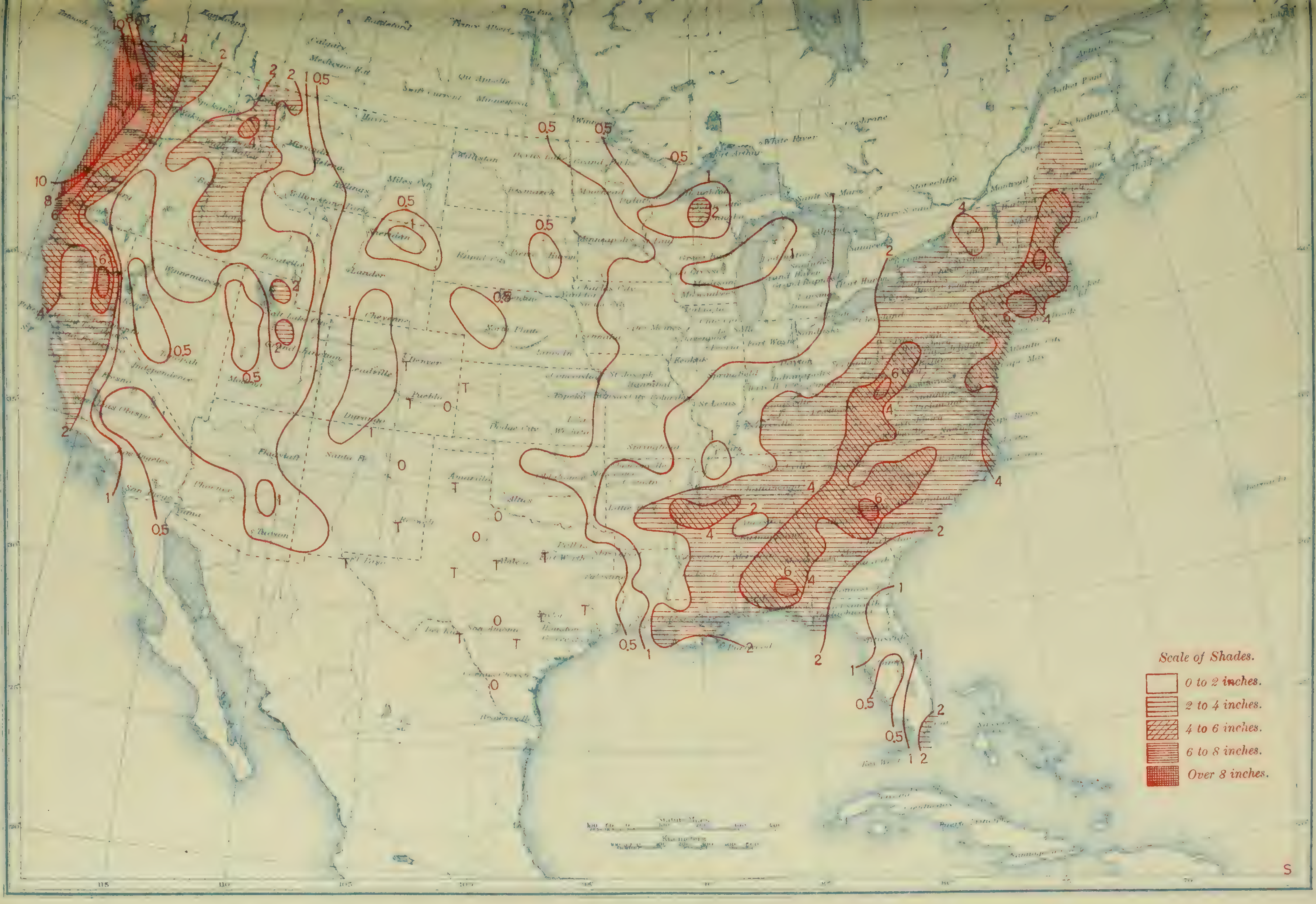
**Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for February, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	17	20	25	34	18	27	24	35	40	43	37	27	21	32	45	54	55	43	58	58	54	62	54	50	46	33	36	33	40	....	....
	Minimum ...	6	2	6	4	9	8	6	4	14	20	18	27	4	7	14	27	30	31	28	33	30	32	36	26	25	27	19	21	14	....	....
Columbia	Maximum...	16	17	21	36	36	22	14	35	41	44	44	35	21	33	43	56	52	40	55	55	59	63	37	49	43	37	32	31	38	....	....
	Minimum ...	8	5	12	20	14	13	6	7	19	22	26	21	9	17	27	29	30	29	29	38	33	37	33	28	25	22	18	24	21	....	....
Fayette	Maximum...	15	16	20	33	24	20	13	33	38	42	38	32	17	19	41	51	53	39	55	56	56	61	35	50	43	36	30	31	38	....	....
	Minimum ...	4	1	9	16	9	8	2	4	12	15	24	15	4	10	20	25	34	30	27	36	30	35	27	25	24	20	17	22	19	....	....
Hannibal	Maximum...	14	16	18	35	35	22	15	31	31	37	35	33	24	31	42	53	50	37	54	48	51	60	37	49	39	35	30	28	37	....	....
	Minimum ...	6	2	10	17	10	13	1	4	16	18	22	20	12	16	24	27	33	25	24	34	31	37	33	28	22	20	16	23	19	....	....
Jefferson City §§	Maximum...	11	18	25	37	23	26	21	35	45	52	46	33	22	33	47	63	58	40	60	60	61	69	38	57	45	36	32	31	40	....	....
	Minimum ...	7	5	6	15	16	14	7	8	21	21	22	32	11	11	21	27	31	30	26	35	32	35	33	27	26	28	19	20	22	....	....
Macon §§	Maximum...	15	18	21	34	17	23	16	33	34	36	37	27	21	32	41	49	51	40	52	54	52	59	36	48	42	29	33	32	39	....	....
	Minimum ...	5	0	0	0	6	6	3	0	14	13	19	24	9	6	15	21	27	30	27	31	29	29	36	25	20	20	15	15	17	....	....
Mexico §§	Maximum...	19	19	25	35	20	25	13	32	39	45	36	32	25	33	44	54	54	31	55	57	56	66	38	42	44	32	32	32	42	....	....
	Minimum ...	7	4	4	13	12	12	4	2	13	16	19	25	11	11	20	24	29	29	27	29	30	30	33	27	23	23	16	17	16	....	....
Oakfield	Maximum...	21	19	30	39	37	28	25	34	47	55	50	41	30	31	48	62	59	49	60	62	57	70	57	54	45	40	34	27	40	....	....
	Minimum ...	6	6	9	17	22	16	7	7	25	23	36	29	16	12	21	30	36	30	26	40	30	46	33	29	25	26	17	23	22	....	....
St. Catharine	Maximum...	17	16	18	30	32	24	18	32	35	35	34	32	22	27	44	49	52	44	52	52	51	59	39	49	43	39	32	30	39	....	....
	Minimum ...	3	− 2	6	12	3	8	3	0	9	15	22	21	8	3	17	24	29	29	26	30	29	38	29	24	20	23	15	20	14	....	....
St. Louis (1)	Maximum...	20	20	28	40	38	28	21	35	42	50	49	37	25	30	44	60	56	42	58	58	57	68	52	52	43	39	32	23	38	....	....
	Minimum ...	10	8	14	22	20	18	7	8	27	25	37	25	20	15	23	32	40	31	28	35	32	47	35	32	27	25	20	25	26	....	....
Unionville §§	Maximum...	10	12	15	31	15	23	16	31	30	32	30	23	20	26	39	50	51	38	57	60	53	57	50	47	44	28	34	30	35	....	....
	Minimum ...	− 4	−10	− 9	0	1	− 3	− 2	− 3	9	10	15	18	4	0	4	15	28	27	25	30	28	31	28	25	16	18	12	15	17	....	....
Warrenton §§	Maximum...	15	17	23	35	23	26	13	33	41	51	45	32	23	34	48	61	55	39	59	57	60	69	41	50	42	31	32	30	41	....	....
	Minimum ...	7	5	5	11	18	14	4	3	13	20	20	32	13	13	14	22	28	29	26	31	29	30	34	29	25	25	17	18	20	....	....
Southeast Lowlands.																																
Cardwell	Maximum...	37	28	38	47	60	55	40	45	47	63	65	66	46	37	50	62	74	68	58	72	67	60	57	60	56	48	37	35	40	....	....
	Minimum ...	22	18	18	24	38	34	30	25	37	30	34	45	28	22	24	30	36	42	28	40	39	43	42	33	35	34	26	26	27	....	....
Caruthersville	Maximum...	41	32	35	47	58	51	39	46	45	50	61	61	42	38	48	60	72	65	57	70	64	55	55	57	52	46	40	35	40	....	....
	Minimum ...	24	19	18	27	37	35	28	25	37	33	37	42	29	23	23	30	37	40	28	38	40	42	38	36	38	36	26	26	28	....	....
Doniphan	Maximum...	31	28	33	43	54	50	37	38	51	57	57	61	40	34	47	64	75	63	60	71	62	60	55	62	56	48	38	34	35	....	....
	Minimum ...	16	15	12	23	35	31	25	19	34	24	28	38	25	16	19	25	33	38	24	34	37	37	38	30	31	34	22	24	22	....	....
Jackson	Maximum...	35	25	33	40	50	43	38	32	50	56	57	52	34	36	48	58	72	60	60	73	66	65	60	59	58	50	39	33	31	....	....
	Minimum ...	14	15	12	24	36	24	18	16	32	26	31	34	24	12	20	27	35	36	25	38	32	40	34	34	31	31	22	23	25	....	....
Marble Hill	Maximum...	32	25	36	43	45	38	29	24	50	59	50	51	35	35	47	49	70	60	60	62	55	50	55	60	52	42	36	40	40	....	....
	Minimum ...	13	3	10	27	38	25	18	11	22	24	26	35	26	12	18	25	35	37	22	39	35	35	35	32	30	28	20	20	25	....	....
Poplar Bluff §§	Maximum...	47	27	29	47	46	55	38	33	38	51	60	60	48	29	49	68	76	44	59	71	59	44	62	52	50	48	47	39	32	....	....
	Minimum ...	18	17	13	....	37	33	24	20	30	26	29	46	26	16	26	32	38	24	32	35	42	32	31	33	33	30	24	26	23	....	....
Ozark Plateau.																																
Birchtree	Maximum...	24	25	37	43	49	45	35	34	55	60	53	48	33	37	56	65	70	60	60	71	67	61	55	59	55	41	37	32	34	....	....
	Minimum ...	10	10	10	22	33	24	19	22	31	25	34	33	19	16	20	26	38	32	22	36	35	46	36	26	28	33	20	21	24	....	....
Cassville	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum ...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum...	12	20	20	39	35	26	25	35	48	58	48	40	25	35	47	63	60	45	59	69	66	65	45	50	47	40	30	29	40	....	....
	Minimum ...	6	4	10	16	15	13	8	9	22	23	28	22	7	12	22	22	33	30	24	39	32	43	25	24	25	25	19	23	21	....	....
Fruit City	Maximum...	28	26	35	43	48	51	30	33	56	59	56	51	33	35	50	65	67	68	61	69	70	65	56	58	49	42	35	32	35	....	....
	Minimum ...	18	13	20	23	35	28	19	18	31	28	32	32	20	15	20	32	43	43	28	40	43	42	33	29	28	32	22	24	20	....	....
Gano	Maximum...	20	18	31	39	36	29	25	33	52	59	58	48	28	37	51	66	66	56	65	67	68	66	52	53	46	40	30	28	41	....	....
	Minimum ...	6	6	8	19	25	18	12	15	30	25	35	28	14	10	22	28	40	29	25	40	40	47	32	27	25	27	18	22	23	....	....
Hollister	Maximum...	32	30	40	44	46	38	36	38	60	66	56	54	40	46	48	66	76	74	72	78	74	60	58	48	48	44	34	30	36	....	....
	Minimum ...	12	10	10	20	34	32	30	32	34	36	42	40	16	20	30	36	40	34	30	40	44	46	38	28	30	34	26	28	36	....	....
Ironton §§	Maximum...	22	23	34	44	48	28	23	34	54	59	57	41	25	35	51	66	71	47	63	71	65	65	39	58	48	39	35	28	40	....	....
	Minimum ...	9	11	8	20	36	21	15	14	31	22	27	40	21	9	19	22	37	33	25	41	30	37	37	30	28	33	19	23	17	....	....
Lebanon §§	Maximum...	20	24	30	35	27	27	27	34	56	68	53	38	20	36	52	65	70	47	65	70	75	70	35	57	50	42	34	30	40	....	....
	Minimum ...	6	4	4	4	24	16	14	14	26	29	34	37	12	13	19	25	31	29	25	23	22	50	33	25	26	27	20	21	25	....	....
Mountain Grove §§	Maximum...	18	23	33	36	46	38	33	41	56	46	56	56	34	36	56	65	67	65	66	69	70	61	36	43	41	43	33	30	30	....	....
	Minimum ...	7	5	5	11	18	22	18	18	23	30	34	42	16	15	19	23	29	30	34	36	38	46	33	25	26	24	15	21	23	....	....
Neosho	Maximum...	21	26	38	40	38	34	32	38	55	64	60	58	31	44	50	68	70	64	61	69	74	71	58	55	54	51	40	32	34	....	....
	Minimum ...	9	8	12	24	27	18	17	23	31	26	31	29	15	19	26	25	34	32	23	38	29	53	34	26	27	30	24	26	25	....	....
Rolla §§	Maximum...	12	19	29	37	29	25	22	33	50	60	54	26	21	36	48	65	64	41	60	65	65	67	37	52	46	35	32	28	38	....	....
	Minimum ...	4	4	4	9	23	17	12	10	21	27	30	25	13	13	19	23	28	29	24	27	35	34	34	27	26	26	19	20	23	....	....
Springfield	Maximum...	14	19	32	35	37	25	30	36	48	58	55	54	20	35	47	63	64	42	58	65	71	60	36	52	45	38	23	30	33	....	....
	Minimum. ..	7	5	15	26	24	18	16	24	30	36	44	20	12	16	26	32	41	30	28	43	42	36	29	26	26	24	20	24	24	....	....
Southwest Plain.																																
Amoret	Maximum...	17	24	27	37	37	29	26	37	49	52	47	44	30	39	46	64	64	60	61	63	72	67	48	52	53	53	32	32	35	....	....
	Minimum ...	5	2	11	19	13	13	9	11	25	22	30	22	8	11	20	26	30	30	27	32	30	40	27	25	24	29	21	23	19	....	....
Clinton	Maximum...	19	20	28	38	31	26	26	36	47	53	48	42	26	37	47	59	62	53	56	60	68	58	45	52	48	45	33	34	39	....	....
	Minimum ...	9	5	10	20	15	15	10	10	21	25	30	25	10	12	21	27	32	30	28	34	32	42	31	23	25	31	21	25	19	....	....
Harrisonville §§	Maximum...	14	19	25	35	16	25	26	35	42	41	44	34	20	33	41	61	60	42	58	59	60	63	43	50	50	34	30	30	36	....	....
	Minimum ...	5	5	16	16	12	14	10	26	20	20	21	34	8	18	18	21	30	30	25	32	32	32	30	28	26	34	22	25	19	....	....
Lamar §§	Maximum...	19	28	35	31	29	27	31	36	48	59	45	35	34	39	50	64	65	46	59	65	76	65	40	55	52	42	28	34	39	....	....
	Minimum ...	8	7	7	19	20	6	14	14	27	27	32	33	13	13	23	26	30	30	25	30	30	36	33	28	26	29	23	22	24	....	....
Lamonte	Maximum...	17	24	25	39	34	24	15	35	45	45	45	37	24	35	45	56	57	49	56	57	60	61	42	45	50	46	35	31	41	....	....
	Minimum ...	7	3	12	21	12	10	5	5	13	18	23	24	6	10	21	25	30	31	28	30	30	36	29	27	25	23	20	24	13	....	....
Marshall	Maximum...	15	16	23	35	34	23	17	35	44	41	39	38	24	32	42	53	53	48	55	54	51	63	....	....	46	45	32	33	38	....	....
	Minimum ...	6	2	9	16	10	10	5	3	13	17	24	24	5	10	21	26	29	25	26	34	31	37	....	....	30	....	19	23	17	....	....
Warrensburg	Maximum...	16	24	21	37	35	26	20	36	45	40	45	37	23	36	45	61	60	47	59	60	66	61	40	51	48	45	32	31	41	....	....
	Minimum ...	6	3	13	18	12	12	7	6	23	19	26	23	6	10	24	28	34	30	28	35	31	36	29	27	25	25	20	24	19	....	....
Warsaw	Maximum...	21	23	30	40	35	25	25	36	52	58	53	50	23	33	43	64	62	54	54	65	72	68	55	53	54	48	43	32	42	....	....
	Minimum ...	8	6	10	20	16	15	10	15	23	25	38	23	18	10	20	24	26	30	27	24	26	50	30	18	30	29	25	21	15	....	....
Northwest Plateau.																																
Avalon	Maximum...	14	20	20	33	31	23	18	34	36	36	38	35	24	29	40	57	55	42	56	56	53	59	40	47	45	41	32	32	38	....	....
	Minimum ...	4	0	10	20	6	6	4	11	18	30	23	23	3	7	18	27	32	30	27	35	30	32	30	27	25	21	11	23	18	....	....
Grant City	Maximum...	9	16	15	31	31	28	17	34	35	32	30	31	18	28	37	49	49	41	55	56	51	45	45	44	43	39	30	32	37	....	....
	Minimum ...	− 3	− 9	3	3	− 2	5	1	1	15	11	23	17	− 4	0	12	24	30	29	29	33	29	35	22	29	21	20	15	20	15	....	....
Kansas City	Maximum...	14	19	18	35	17	26	16	37	40	35	44	34	20	35	42	62	59	43	62	60	59	60	46	49	48	38	30	30	35	....	....
	Minimum ...	5	2	13	16	10	12	7	7	24	22	32	14	5	13	29	36	40	33	34	39	34	35	26	32	28	24	20	24	25	....	....
Kidder §§	Maximum...	10	18	19	32	12	22	18	33	32	32	34	25	18	30	36	52	50	49	56	54	47	55	43	47	44	30	31	28	38	....	....
	Minimum ...	0	− 4	9	19	5	11	4	18	21	18	29	25	− 3	11	18	32	31	29	34	34	29	42	25	32	22	27	18	21	27	....	....
Lexington §§	Maximum...	17	19	22	34	16	24	17	36	43	38	39	30	20	32	42	57	58	42	58	58	51	64	42	52	52	33	33	35	37	....	....
	Minimum ...	5	1	10	16	10	9	6	5	17	18	25	25	4	10	23	28	35	30	30	35	31	41	29	28	25	31	20	24	17	....	....
Maryville §§	Maximum...	10	10	28	22	15	20	13	35	28	29	31	22	19	30	38	51	49	40	56	54	59	45	46	45	44	27	33	34	39	....	....
	Minimum ...	− 3	−10	−10	3	− 1	− 1	0	0	12	16	16	20	− 5	− 5	4	16	28	28	28	32	28	28	21	20	21	21	16	16	14	....	....
Oregon	Maximum...	10	14	17	31	20	23	16	36	32	35	36	33	16	31	36	50	50	43	54	53	56	49	42	45	46	38	30	34	37	....	....
	Minimum ...	− 4	− 7	5	7	2	2	3	4	18	15	26	13	− 3	7	18	27	32	29	30	32	32	33	23	32	25	22	18	20	17	....	....
St. Joseph	Maximum...	10	15	17	32	14	24	13	36	32	33	37	31	19	34	37	53	52	41	58	56	57	50	46	46	47	38	32	31	37	....	....
	Minimum ...	0	− 4	6	12	5	8	4	7	19	18	28	11	0	11	22	30	33	31	31	36	32	33	25	32	26	22	20	23	20	....	....
Trenton	Maximum...	11	11	18	30	30	31	19	34	33	32	34	32	20	28	36	48	47	45	52	52	46	52	48	47	43	41	31	33	37	....	....
	Minimum ...	0	− 6	2	10	4	8	3	3	10	15	25	20	0	5	11	25	30	30	29	31	31	36	28	28	22	24	17	22	28	....	....

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
S

05
MS
Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

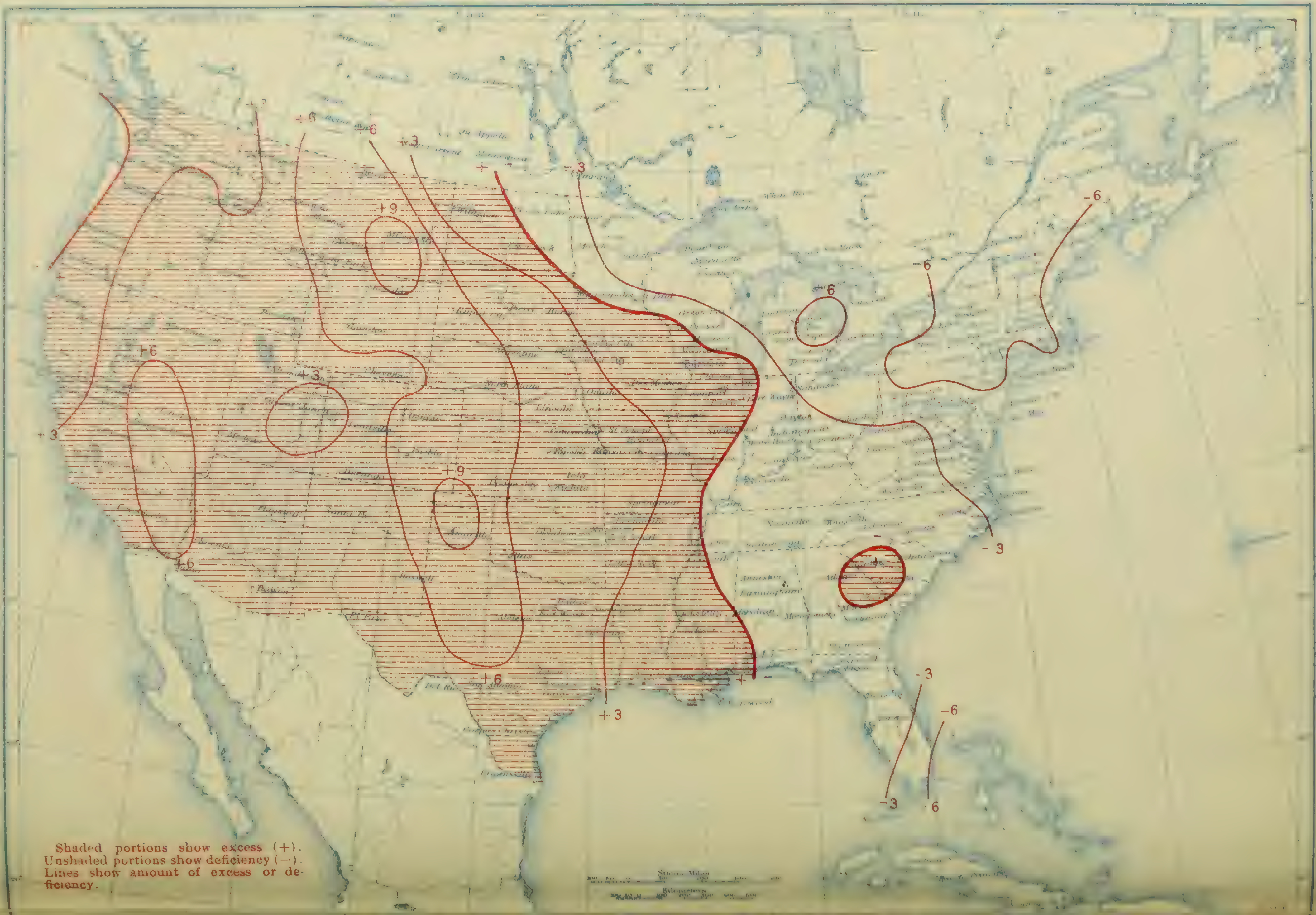
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MARCH, 1916

BY
GEORGE REEDER
SECTION DIRECTOR

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
APRIL 25, 1916

Departure of the Mean Temperature from the Normal, March, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

XX. COLUMBIA, MO., MARCH, 1916. No. 3

GENERAL SUMMARY.

ve for the first three or four days, March weather was
ormly moderate and favorable. The precipitation was
eient for needs. There was somewhat more sunshine than
l. The ground was in good plowing condition, and the
ing of oats progressed. At the close of the month the wheat
was reported to be only in fair condition, much of it
g winter killed, though the early sown had a good root
th. The outlook for fruit was good, except peaches which
mostly winter killed.

ie month was 1.3° warmer than normal, and about 10°
ner than March, 1915. While all divisions, except the
ieast, experienced an excess of temperature, at the same
the western divisions were warmer than the eastern,
h is somewhat out of the ordinary. The coldest weather
rred during the first four days, when freezing temperatures
ned generally; zero conditions, however, were confined to
stations in the northwest plateau, on the 3d. The warm-
reather began on or about the 20th, but, except the 21st
h was an unusually warm day, temperature conditions
not markedly unusual.

ie western half of the State was somewhat wetter than the
rn, which also is contrary to the usual moisture distribu-
This, however, was largely the result of one storm,
h moved slowly northeast across the State during the 25th
26th. The more or less wet periods were the first three
14—15th, and 25th to the 27th, the precipitation of the
and second periods being mostly snow.

oderate thunderstorm conditions occurred on several days,
small hail fell in a few localities on three days.

ie Grand River at and immediately above Brunswick was
what above a bank-full stage at the close of the month;
the Osage at Warsaw went out of its banks for a short time
ie 26th, but the resulting damage was slight.

TEMPERATURE.

ie monthly mean temperature, 63 stations reporting was
°. The mean departure from the normal for 52 stations
ng 10 or more years' record was plus 1.3°. The means
departures for the five divisions were as follows: Northeast
, 42.9°, or 0.8° above normal; southeast lowlands, 46.0°,
.2° below normal; Ozark plateau, 47.9°, or 1.1° above
ial; southwest plain, 47.2°, or 2.5° above normal, and
hwest plateau, 43.0°, or 2.7° above normal. The average
ber of days with temperature 32° or lower was 15. Nine
ons experienced temperatures of 90° or higher on the 21st.

HUMIDITY.

ie average relative humidity, determined from the records
regular stations, was 70 per cent, which is about normal.

PRECIPITATION.

ie average precipitation, 76 stations reporting, was 2.53
es. The departure from the normal for 66 stations having
r more years' record was minus 0.65 inch. The monthly
ages and departures for the five divisions were as follows:
heast plain, 2.27 inches, deficiency 0.70 inch; southeast
ands, 2.06 inches, deficiency 2.52 inches; Ozark plateau,
inches, deficiency 1.77 inches; southwest plain, 4.31
es, excess 1.88 inches, and northwest plateau, 2.67 inches,
ss 0.59 inch. The greatest local monthly precipitation was 5.45 inches, at Avalon, and the least was 0.17 inch, at Tarkio. The greatest amount recorded in any 24 consecutive hours was 4.25 inches, at Avalon on the 25—26th. The average snowfall was 3.1 inches; this is practically normal. The heaviest falls, ranging in amounts from about 5 inches to over 12 inches, occurred in the Osage watershed and in the lower part of the Missouri from Cooper County east to St. Louis, and northward to Marion County.

The average number of days with 0.01 inch or more precipitation was 7.

WIND.

The prevailing winds were from the northwest. The average hourly velocity was 12.3 miles, or about 2 miles above normal. Fresh to strong winds prevailed on the 7th, 14th, 21st and 22d.

SUNSHINE AND CLOUDINESS.

There was an average of 14 clear days during the month, which was above the normal. The percentage of possible sunshine, computed from the records of Kansas City, Columbia and St. Louis was 61, or 2 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—6th and 21st. Halos, solar—9th, 11th, 12th, 19th, 21st, 23d, 25th and 30th. Halos, lunar—9th, 10th, 11th, 12th, 18th and 19th. Hail—6th, 20th and 21th. Sleet—14th, 26th and 27th. Thunderstorms—6th, 13th, 15th, 20th, 23d, 24th, 25th and 26th.

ERRATA FOR JANUARY, 1916.

Brunswick: lowest temperature should be −15 on the 13th. Kidder: number of days with .01 or more precipitation should be 9. Macon: total precipitation should be 6.67. Rolla: date of highest temperature should be 1st.

PRESSURE, HUMIDITY, SUNSHINE AND WIND DATA.

Stations.	Mean barometric pressure (sea-level)	Mean Relative Humidity. 7 a. m.	7 p. m.	Sunshine. Total hours.	Percentage of possible.	Wind. Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	29.94	79	......	197	53	7,783	10.5	40	w.	22
Hannibal	29.96	78	......	......	......	8,384	11.3	37	w.	22
Kansas City	29.95	74	59	244	66	10,524	14.1	60	w.	21
St. Joseph	29.96	79	56	213	58	8,586	11.5	56	nw.	21
St. Louis	29.96	82	66	240	65	11,320	15.2	54	w.	22
Springfield	29.96	77	56	232	62	10,562	14.2	49	nw.	22
Cairo, Ill	29.98	75	62	......	......	8,904	12.0	41	n.	14
Keokuk, Iowa	29.97	82	72	224	60	6,973	9.4	36	w.	7

COMPARATIVE DATA FOR MARCH.

Year.	Temperature. Mean.	Departure.	Highest.	Lowest.	Precipitation. Mean.	Departure.	Greatest in 24 hours.	Total snowfall unmelted.	Number of Days. With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	38.5	−4.8	90	1	4.02	+1.11	.....	.....	10	....	....	....
1889	41.3	+1.0	84	13	1.98	−0.93	.....	...	5	....	....	....
1890	37.3	−6.0	76	−11	2.61	−0.30	.....	5.7	8	....	....	....
1891	36.6	−6.7	78	−11	3.01	+0.10	.....	7.1	10	....	....	....
1892	38.9	−4.4	87	5	3.11	+0.20	.....	.....	8	8	10	13
1893	40.5	−2.8	86	1	2.86	−0.05	2.15	3.2	7	11	10	10
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	4.4	9	14	7	10
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	− 5	6.07	+3.16	4.10	1.0	12	9	9	13
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.4	−4.1	78	− 8	2.93	+0.02	4.30	8.9	6	9	11	11
1900	40.4	−1.9	88	− 4	1.48	−1.43	3.41	0.2	6	15	9	7
1901	42.7	−0.6	85	− 1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.50	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	−8.7	75	− 5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	1.4	6	16	8	7
1912	35.2	−8.1	89	− 4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	−1.3	87	− 2	2.75	−0.41	3.01	4.7	8	3	7	11
1915	36.4	−8.1	70	6	1.50	−1.74	1.85	7.9	6	7	8	16
1916	47.0	+1.3	95	− 2	2.53	−0.65	4.25	3.1	7	14	8	9

Climatological data for March, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	....	....	....	....	....	....	2.80	0.34	1.02	5.5	7	18	3	10	se.	C. Randecker.
Brunswick	Chariton	652	36	44.0	+2.3	82	21	9	3†	42	4.18	+2.05	2.75	3.0	6	13	1	17	nw.	Louis Benecke.
Columbia	Boone	784	26	44.7	+3.3	86	21	12	3	40	1.93	-1.10	0.73	7.1	8	7	12	12	n.	U. S. Weather Bureau.
Fayette	Howard	725	31	43.4	+0.9	85	21	8	3	41	2.46	−0.22	1.06	4.0	7	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	45.7	+0.7	86	21	4	4	50	1.26	−1.64	0.46	4.5	4	10	12	9	se.	Dr. C. W. Knapp.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	4.38	+1.82	2.20	0.7	7	4	11	16	ne.	J. W. Pulliam.
Hannibal	Marion	534	23	41.8	+0.2	81	24	10	3	42	1.44	−1.32	0.63	6.5	10	12	8	11	n.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	....	....	....	....	....	....	1.47	−1.65	0.42	8.0	9	11	7	13	se.	C. T. Maushund.
Jefferson City	Cole	628	30	45.2	+1.7	86	21	10	4	50	1.69	−1.42	0.43	5.1	10	21	2	8	n.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	....	....	....	....	....	....	4.38	....	2.08	2.2	6	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	45.2	+2.6	82	25	7	4	40	1.67	−0.92	0.50	10.7	7	12	12	7	nw.	J. T. Farrell.
Macon	Macon	881	18	39.9	−0.6	80	21	7	3†	55	3.15	+0.48	1.86	1.5	5	11	10	10	nw.	John A. Cook.
Mexico	Audrain	797	38	42.0	−0.3	83	21	9	4	50	1.75	−0.90	0.64	9.7	9	15	1	15	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	45.1	−0.6	83	21	9	4	44	1.41	−2.29	0.52	10.0	6	5	18	8	se.	E. E. Steines.
Palmyra	Marion	652	4	39.0	....	73	21	9	3†	51	1.28	−1.64	0.42	5.3	7	12	7	12	ne.	W. B. Markell.
St. Catherine	Linn	914	3	42.2	....	77	21	7	3	40	4.02	....	1.97	0.5	6	10	15	6	n.	L. D. Baker.
St. Charles	St. Charles	614	38	43.8	−0.2	80	13†	8	4	39	1.39	−0.86	0.63	9.0	6	11	11	9	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	45.0	+1.5	80	13	15	4	48	1.83	−1.60	0.68	9.4	9	12	8	11	nw.	U. S. Weather Bureau.
St. Louis (2)	do.	578	4	44.1	....	80	13†	14	3	44	2.14	....	0.64	10.4	11	13	6	12	se.	St. Louis University.
Steffenville	Lewis	576	23	41.8	+0.1	82	24	8	3	48	1.62	−1.27	0.90	2.0	6	7	15	9	e.	Frank Hall.
Unionville	Putnam	1,072	23	38.2	+0.4	76	20†	3	4	54	3.66	+1.38	1.89	1.0	7	11	8	12	se.	Geo. W. Davis.
Vandalia	Audrain	796	5	....	....	....	....	....	....	....	0.40	....	0.25	4.0	2	....	....	....	....	C. B. Ellis.
Warrenton	Warren	865	25	41.5	−0.1	82	21	7	4	54	1.63	−1.77	0.52	4.5	8	7	10	14	s.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	1.65	−1.70	0.50	3.0	8	14	5	12	sw.	D. L. Albert.
Cardwell	Dunklin	225	5	50.8	....	82	13	23	1	39	3.02	....	0.90	T.	7	9	17	5	sw.	F. E. Tate.
Caruthersville	Pemiscott	220	25	50.5	−0.6	81	13	24	4†	35	2.80	−1.14	0.88	T.	6	20	2	9	e.	H. E. Averill.
Doniphan	Ripley	440	11	48.6	−0.5	82	13	19	4	46	1.96	−1.96	0.70	T.	9	17	7	7	nw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	49.6	+2.2	84	11†	17	4	53	1.49	−3.33	0.60	3.5	10	6	15	10	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	46.0	−1.5	80	21†	15	4	40	1.50	−3.27	0.75	2.0	6	14	11	6	n.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	....	....	....	....	....	....	3.17	−2.55	0.95	0	13	12	3	16	ne.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	....	....	....	....	....	....	0.98	....	0.50	0.5	4	17	0	14	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	47.0	−1.3	81	14†	20	4†	44	2.38	−2.99	0.79	0	6	18	3	10	....	Albert E. Cox.
Sikeston	Scott	328	15	49.3	+0.7	81	13†	22	2†	40	2.01	−3.41	0.60	T.	9	14	10	7	n.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	46.5	−0.5	78	21	22	4	42	1.65	−2.37	0.73	0.5	11	8	12	11	s.	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	....	....	....	....	....	....	1.54	−1.40	0.26	3.5	11	18	2	11	se.	G. V. Randolph.
Bagnell	Miller	594	....	....	....	....	....	....	....	....	1.95	−1.29	0.83	0	6	15	6	10	w.	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	47.2	−0.6	84	13†	15	4	45	2.32	−2.58	0.84	1.8	6	22	3	6	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	50.0	+3.5	90	21	11	3	45	2.36	−0.65	1.06	6.5	8	20	5	6	sw.	A. C. Fink.
Cassville	Barry	1,500	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	44.8[h]	....	81	16	20	8	41	....	....	....	T.	....	20	5	6	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	51.6[b]	+2.3	91	21	14	3	49	2.17	−1.40	0.98	T.	6	24[c]	1[c]	3[c]	sw.	H. E. Dean.
Eldon ††	Miller	934	15	45.9	....	87	21	9	4	55	1.63	−2.04	0.61	3.0	5	12	15	4	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	48.0	....	84	13	20	3†	45	2.17	....	1.35	0	3	24	5	2	w.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	46.6	−0.1	85	21	14	4	51	2.41	−1.64	0.74	3.1	9	17	4	10	se.	A. C. Leach.
Goodland	Iron	1,000	11	45.2	−0.1	83	13†	9	4	51	1.48	−2.64	0.68	2.5	6	19	6	6	s.	F. M. Adams.
Hollister	Taney	1,000	7	53.2	....	88	21	24	3	46	1.33	−2.79	0.40	0	4	21	0	10	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	47.8	+1.0	88	21	17	4	45	2.11	−2.55	0.58	1.5	8	18	3	10	nw.	R. F. Harmon.
Ironton	Iron	925	38	45.2	+0.1	84	21	9	4	48	1.56	−2.84	0.62	2.5	8	4	15	12	ne.	W. H. Delano.
Koshkonong	Oregon	911	15	49.6	+0.3	86	21	20	4	38	2.73	−1.37	1.04	0.5	6	12	9	10	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	46.8	+0.7	84	13	15	4	56	2.08	−1.78	0.50	6.0	8	22	4	5	w.	Earl J. Breech.
Lockwood	Dade	1,088	21	49.4	+2.3	89	21	10	3	38	2.32	+0.03	1.21	3.5	5	16	3	12	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	44.8	−1.2	89	21	16	4	49	1.60	−2.64	0.68	T.	6	7[i]	7[i]	8[i]	nw.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	J. R. White & Son.
Neosho	Newton	1,083	33	51.8	+3.9	91	21	13	3	45	2.43	−1.01	1.35	0	6	19	4	8	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	43.8	−1.1	88	21	9	4	58	2.04	−1.48	0.66	7.0	6	17	6	8	n.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	47.8	+4.3	88	21	11	3	37	2.42	−1.65	0.76	3.8	10	16	7	8	se.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	49.2	....	95	21	3	3	51	3.05	....	2.10	3.0	7	11	11	9	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	E. F. Hirni.
Clinton	Henry	800	29	49.2	....	83	13	12	3	40	4.75	+2.18	2.60	7.5	5	10	15	6	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	44.4	+3.9	90	21	5	2†	57	4.36	+1.82	2.25	2.5	10	8	6	17	sw.	A. J. Sharp.
Lamar	Barton	964	35	48.0	+1.3	92	21	9	3†	56	4.82	+1.98	2.82	T.	7	13	12	6	sw.	Dick B. Houston.
Lamonte	Pettis	863	27	44.4	....	85	21	6	3	43	3.92	+1.46	2.30	8.0	6	10	15	6	nw.	J. Ed. Hall.
Marshall	Saline	779	25	43.9[c]	+1.5	85	21	8	3	41	5.13	+2.55	2.50	2.5	6	9[b]	11[b]	9[b]	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	49.8	....	92	21	6	3	44	3.92	+0.85	2.60	3.0	6	20	5	6	sw.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	W. E. Mathews.
Warrensburg	Johnson	883	37	46.6	+3.3	90	21	7	3	44	5.32	+2.93	3.00	3.8	8	13	9	9	nw.	Geo. H. Collins.
Warsaw	Benton	883	11	49.0	+2.3	90	21	9	4	46	4.28	+1.24	1.92	12.5	8	11	16	4	sw.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	....	....	....	....	....	....	3.57	....	2.04	0.8	7	12[a]	9[a]	9[a]	nw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	45.4	+3.5	83	21	6	3	37	5.45	+2.77	4.25	2.0	5	20	7	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	42.4	+3.3	80	12	4	3	45	1.75	−0.56	0.85	0.5	4	7	12	12	nw.	M. H. Moulton.
Chillicothe	Livingston	....	1	....	....	....	....	....	....	....	3.57	+0.78	1.78	0.5	5	10	3	18	....	Hocey O. Dupy.
Conception	Nodaway	982	31	41.2	+2.2	81	21	0	3	40	1.12	−0.60	0.45	2.0	6	9	15	7	n.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	41.4	+0.9	79	12	1	3	43	1.25	−0.83	0.74	T.	3	17	4	10	e.	W. H. Campbell.
Kansas City	Jackson	963	27	45.8	+5.0	89	21	6	3	38	4.46	+1.64	2.68	2.7	9	15	8	8	n.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	42.3	+1.5	84	21	8	3	42	3.00	+0.67	1.15	2.0	6	15	7	9	nw.	J. F. Sharp.
Lexington	Lafayette	813	34	43.8	+0.7	87	21	7	3	41	3.62	+1.48	1.42	2.2	5	13	0	18	s.	J. W. Keithley.
Liberty	Clay	861	27	46.5	+4.0	89	21	4	3	47	4.41	+2.05	2.64	2.0	7	21	2	8	nw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	39.0	+1.9	82	21	−2	3†	48	1.40	−0.54	0.52	2.5	8	18	0	13	s.	J. R. Brink.
Oregon	Holt	1,113	60	42.2	+3.3	84	21	0	3	40	1.52	−0.52	0.52	1.0	6	13	10	8	n.	Tom Curry.
St. Joseph	Buchanan	967	44	43.2	....	88	21	4	3	41	2.98	+0.97	1.56	1.2	8	9	13	9	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	42.8	....	82	12	−2	3	47	0.17	....	0.07	T.	4	16	4	11	nw.	John F. Frazier.
Trenton	Grundy	812	21	43.2	+2.7	76	21	7	3	39	2.68	+0.41	1.13	1.0	7	8	11	12	ne.	W. H. Estes.
State means and extremes				47.0	+1.3	95	21	−2	3†	57	2.53	−0.65	4.25	3.1	7	14	8	9	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. No. 1 of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for March, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ille ‖	Missouri	.08	.30	.17											T.	.10										1.02	.83	.30	T.			T.	2.80
wick ‖	Grand	T.	.07	.12																					T.	2.75	.68	.82				.04	4.48
bia***	Missouri	.38	.12	.03				T.							.16	T.						T.	T.	T.	T.	.25	.72	.08			T.	.19	1.93
e	do	.20	.09	.04											T.											1.06	.65	.23				.19	2.46
	do	.46	T.						T.						.17	T.									T.	T.	.43	.20				T.	1.26
	Mississippi	.07	T.					T.															.07		.21	1.50	1.46	.60				47	4.38
bal***	do	.37	.02	.07			T.	T.	.01						T.	T.							.01	.01		.04	.62	.18				.11	1.44
nnn ‖	Missouri	.06	.42	.17					T.							.16	T.				T.		T.		T	.22	34	.02	.06			.02	1.47
on City ‖	do	.20	.40	.15							.08					.10	.05									.20	.43	.05	.03				1.69
ville	Chariton		.20					02																.02		2.08	1.65					.41	4.38
ana	Mississippi	.50	T.					.03							.30								T.			.15	.30	.34					1.67
	Chariton		T.	.13			T.	T.	T.							T.							T.		T.	1.86	.70	.37				.09	3 15
o	Mississippi	.02	.40	.14												.19									.01	.05	.64	.20	.10				1.75
ld	Meramec	.52		.06											.09						T.		T.			.20	.12	.42				T.	1.41
ra	Mississippi	T.	.25	.10				T.																.15		.04	.14	.42	.18			T.	1.28
herine	Grand	T.		.03			T.	T.	T.														T.		.02	1.97	1.52	.45				.03	4.02
arles	Missouri	.63	.10	.20			T		T.						.06						T.		T.			.20	.20						1.39
ns (1)***	Mississippi	.68	.07	.02				T.	T.						.17						.08		T.	T.		.53	.15	.12		T.		.01	1.83
is (2)	do	.64	.06	.12				.02							.53						.10		T.	T.		.29	.12	.19	.02			.05	2.14
ville	do	.07		.05				.03								T.							T.			25	.90	.32					1.62
ville ‖	Grand		.06	.06					.03							T.							.10		.12	1.40	.45	1.44				T.	3.66
ha	Mississippi	.25													.15											T.							0.40
nton	do		.52	.15					.03							.17	T.							T.		.06	39	.03	.28			T.	1.63
heast Lowlands.																																	
irardeau	Mississippi		.40	.20				.50								.20					.05					.05	.20	.05					1.65
ell	do	.90	.24	T.				.40			T.				.30	.22					.20					.76		T.					3.02
ersville	do	.88	T.	T.				.50			T.				.30	.34					T.					.55	T.	.23	T.				2.08
han	Black	.70	.08	.03			T.		T.						.15	.18					.12					57	.08	.05					1.96
n	Mississippi	.60	.10	.08			.32		.01	.02					.10						.10					.08	.08						1.49
Hill	do		.75				.30								.10						.20					.10	.05						1.50
adrid ‖	do		.95	.01	T.			.30	.01		.06	.01			15	.76					.02	.08				.01	.56	.25					3.17
(near)	do					.05		.30																		.50	.13						0 98
Bluff	Black		.79		T.			.15							07	.51					.08						.78		T.				2.38
on	Mississippi	.60	.01	T.				.12	T.						.27	.14					.10					.39	.05	.33					2.01
Ill.***	do	.73	.02	.01			.09	T.	.01		.03				.17	T.					.17			T.		.29	.09	.04					1.65
k Plateau.																																	
ton	Gasconade	.11	.16	.15	.07										.05	.16	.10									.20	.17	.26	.11			T.	1.54
ll	Osage	T.	.44	.17												.15										.27	.83	.09				T.	1.95
ree	Black	.81	.05												.12											.84	.40	.10					2.32
r	Osage	.20	.15	.20											.30											1.06	.12	.21				.12	2 36
lle	White																																
r	Gasconade	T.							T.																			.56			T.		
	Neosho	.45	T.												.12										T.	.98	.02	.14				.46	2 17
	Osage	.53	T.												.14											.18	.61	.17					1.63
ity	Black	.60																							1.35		.22						2.17
	Meramec	.74	.15	.10							T.				.28	.03										.53	.30	.12				.16	2.41
nd	Black		.10	.10											.05	.30										.68	.25						1.48
ter	White	.40													.40					.28												.25	1.33
on	Gasconade	.32	.05	.10	.36			T.			T.			T.	.24	T.										.58	.33	T.			T.	.13	2.11
n	Mississippi		.62	.03	.02		T.		T.		T.			T.	.10	.17	T.				T.					.30	.27	.05				T.	1.56
onong	Black	1 04	T.												.27						.05					.88	.34	.15					2.73
on ‖	Osage	.20	.50	.17				T.							.30	.18										31	.34	.08	T.				2.08
ood	do	.63	.15	T.											.25	T.										1.21	T.	.08				T.	2.32
ain Grove ‖	White	.14	.28												.12	.16										.68	.22					T.	1 60
. Vernon	Neosho																																
o	do	35						T.							.15								T.	T.	T.	1.35	.04	21				.33	2 43
	Meramec	T.	.66	.24					T.						T.	.30	T.									.32	.46	T.	.06			T.	2.04
eld ***	White	.58	.04	.02				T.	.04					.14	.54	T.									T.	.76	.09	.07				.14	2.42
land	Osage																																
hwest Plain.																																	
t	Osage	T.	.02	.01				T.			T.				T.	T.								.01	.40	2.10	.21	.30			T.	T.	3.05
ton City	do																																
n	do			.75											.10											2.60	.67	.63					4.75
onville	do	.10	.05	.16						.03	.05														.02	2.25	.78	.84				.08	4.36
	Neosho	06	.30	.08											T.	1.03										2.82	T	.25				.28	4.82
ite	Missouri	.24	.18	.05	T.																			T.	T.	2.30	70	.45			T.	T.	3 92
all	do	.10	.05	.10				T.		T.	T.				T.	T.								T.		1.90	2.50	.48				T.	5.13
a	Osage	.10	.10	.10																					.90	2.60	.12						3 92
a	do																																
nsburg	Missouri	11	.22	.07					T.	.01	T.				T.	T.								T.	T.	3.00	1.36	.49				.06	5.32
w	Osage	.78	.14	.20											.18	.09								T.		1.92	.55	.42					4.28
ly	Missouri	.03	.02	.14				T.									T.								T.	2.04	72	.57	.05				3.57
hwest Plateau.																																	
n	Grand		.25																							1.75	2.50	.70				.25	5 45
ay	do	T.	T.	.05				T.	T.	T						T.							T.		T.	.50	.85				18	.17	1.75
othe	do		.01	.04																						1 40	.34	1 78					3.56
ption	Missouri	T.	.10	.05				T.	T.	.05					T.								T.	.05	.09	.15	11				.45	.07	1.12
City	Grand	T.		T.					T.														T.	T.	.20	.31	T.	T.	T.		.74	T.	1 25
s City***	Missouri	.01	.22						.01															01	.55	.63	2.68				.03	.32	1 46
r	Grand		T.	.04				T.																	.10	1 00	66	1.15				.05	3.00
ton ‖	Missouri	.03	T.	.19																						1.42	.94	1.04				T.	3 62
y	do		.20					T.	T.															T.	10	1.23	2.64					.24	4.41
ille ‖	do		T.	.15				.05	T.	.05					T.								.20		.02	.32	09					.52	1 40
	do		.10																						.68		.17				.52	.05	1.52
eph***	Missouri	T.	.09					T.	01							T.							T.	.03	1.07	.52	69				.43	.14	2.98
	do		T.					T.																.05	.04	.07					.01		0 17
n	Grand	T.	.07					T.	T.							T.						T.		.05	1.13	.28	92				.04	.1!	2.68

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xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the f observation.

Precipitation measured in the morning: amount then recorded is for the preceding 24 hours.

. Trace, or less than 0 01 inch.

** Regular Weather Bureau station; precipitation is for 24 hour period, midnight to midnight.

*Precipitation in the next following measurement.

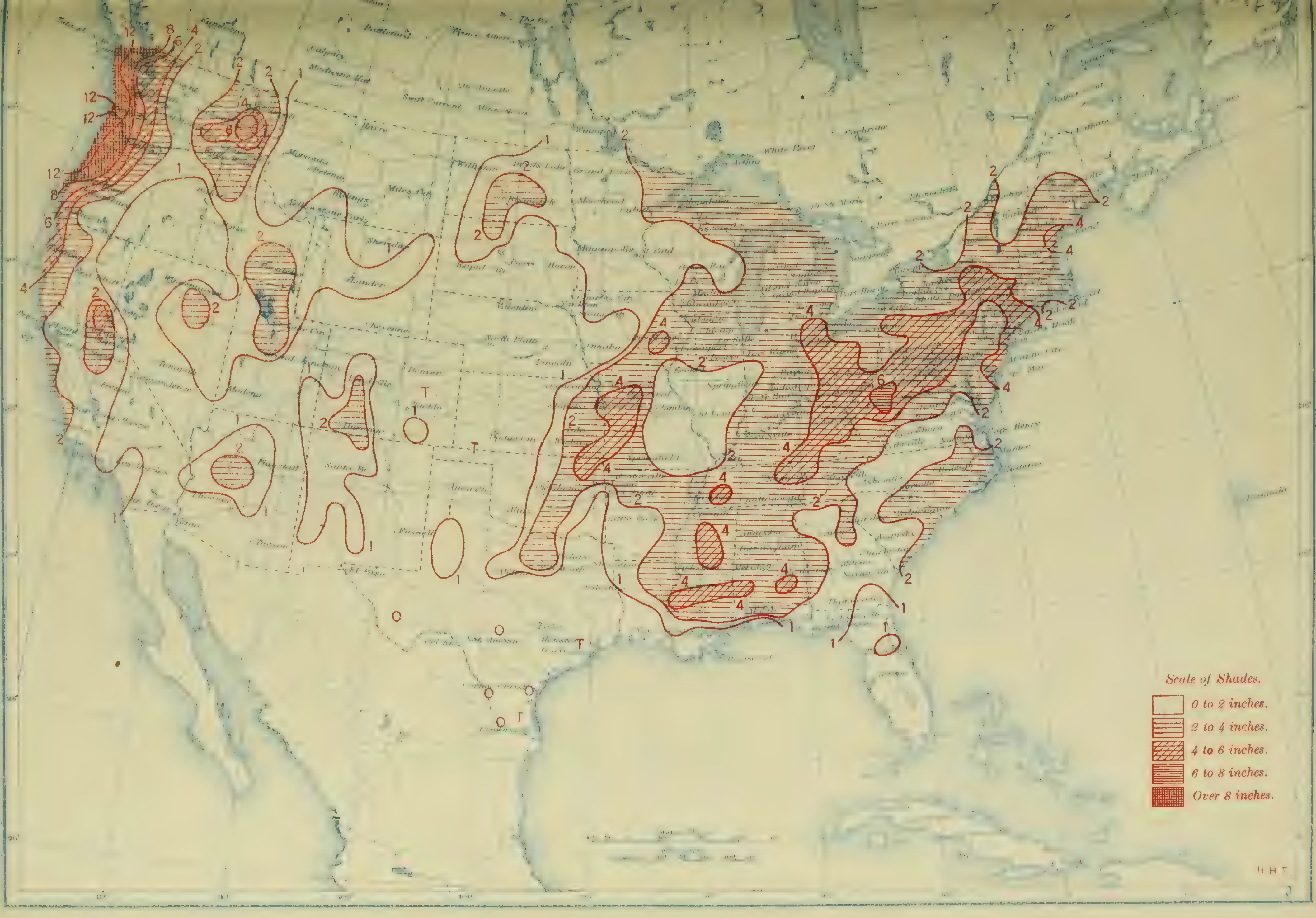
Separate dates of fall not recorded.

Daily temperatures for March, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	32	38	35	51	54	56	40	43	57	43	50	76	77	37	41	57	59	66	54	72	82	57	55	77	61	45	58	65	64	64	58
	Minimum	27	26	9	9	31	35	32	20	24	28	20	28	40	35	31	21	30	33	29	39	40	57	33	38	55	41	33	31	37	39	48
Columbia	Maximum	32	32	26	50	53	66	43	38	56	52	49	76	76	51	36	52	56	62	54	71	86	64	51	82	64	56	51	63	62	68	59
	Minimum	27	25	12	14	34	39	24	20	26	27	21	41	45	30	26	26	32	40	31	41	46	34	30	47	55	38	33	33	37	46	48
Fayette	Maximum	31	31	22	48	51	62	40	41	55	50	47	76	77	48	37	53	57	62	55	70	85	64	56	80	68	53	53	60	64	66	57
	Minimum	26	23	8	10	32	36	23	20	27	26	20	35	40	32	25	22	30	35	29	41	46	32	29	46	53	35	33	33	35	45	46
Hannibal	Maximum	31	31	26	45	42	65	41	36	53	48	44	70	68	40	33	44	48	56	46	67	73	71	51	81	71	55	46	57	54	65	63
	Minimum	29	24	10	12	31	35	23	19	23	25	22	38	40	30	24	24	30	32	30	39	41	29	26	42	55	38	32	36	42	43	50
Jefferson City §§	Maximum	38	35	28	56	61	71	48	40	59	41	55	77	81	41	35	54	63	63	71	76	86	46	58	81	69	48	49	62	64	70	66
	Minimum	27	25	14	10	27	38	38	21	24	31	22	30	54	31	28	23	28	34	31	34	36	45	28	33	55	44	35	33	37	44	50
Macon §§	Maximum	30	31	23	47	44	55	38	38	53	38	46	75	74	35	37	50	52	61	52	69	80	49	55	78	64	42	53	60	62	66	60
	Minimum	18	24	7	7	22	30	33	16	17	25	20	20	38	32	25	23	25	29	26	28	40	37	26	27	40	41	32	31	33	41	42
Mexico §§	Maximum	31	33	24	51	51	66	47	39	55	49	48	76	79	37	35	52	54	61	54	70	83	47	56	79	72	48	48	60	60	68	62
	Minimum	16	24	13	9	15	31	35	19	19	26	20	37	40	33	23	24	30	80	27	32	40	41	27	29	47	46	35	39	32	35	41
Oakfield	Maximum	34	33	29	51	50	78	53	39	54	51	49	75	81	69	35	48	52	61	53	66	83	78	50	81	70	63	43	59	55	67	67
	Minimum	26	25	18	9	34	48	32	19	23	31	24	38	57	29	24	21	29	34	32	36	52	34	25	45	55	41	32	32	32	42	50
St. Catharine	Maximum	35	30	26	46	45	56	44	39	52	49	44	70	70	66	37	49	52	59	50	70	77	75	53	71	68	51	52	59	60	61	57
	Minimum	26	24	7	14	32	35	30	15	24	25	18	32	37	31	24	21	28	39	26	38	43	35	27	41	59	37	33	31	31	43	47
St. Louis (1)	Maximum	35	35	26	48	49	78	53	37	52	53	45	73	80	61	33	46	48	58	50	63	77	78	49	79	66	60	45	49	55	66	66
	Minimum	29	24	17	15	35	41	27	22	29	31	29	38	56	30	25	26	31	35	34	36	53	30	27	43	56	45	33	34	41	45	53
Unionville §§	Maximum	30	26	28	50	46	52	33	36	55	38	46	72	74	36	37	48	51	57	54	76	74	57	59	76	57	46	57	56	60	64	57
	Minimum	15	18	4	3	20	26	30	13	15	20	14	18	31	30	20	22	25	27	23	28	36	33	22	26	40	34	32	28	31	36	42
Warrenton §§	Maximum	32	32	22	54	59	74	48	37	51	38	49	77	79	35	33	50	53	61	52	59	82	48	53	81	68	49	36	55	55	65	65
	Minimum	21	24	17	7	17	33	35	18	18	25	22	26	44	33	22	21	23	29	28	33	38	48	25	27	48	46	35	32	34	33	43
Southeast Lowlands.																																
Cardwell	Maximum	35	37	38	54	67	77	75	49	57	66	50	69	82	77	40	51	62	78	71	63	81	79	61	78	66	62	56	62	66	72	80
	Minimum	23	26	28	25	38	61	40	29	29	46	29	34	53	38	30	24	34	42	45	40	51	46	32	50	45	47	40	38	35	42	47
Caruthersville	Maximum	34	36	37	51	65	74	70	51	56	58	51	69	81	70	53	48	58	77	72	64	79	74	69	77	68	60	52	52	64	69	77
	Minimum	28	32	28	24	36	58	40	27	30	42	29	34	54	37	32	24	35	48	42	42	52	47	32	49	56	49	49	39	37	44	50
Doniphan	Maximum	34	34	34	53	62	76	65	48	57	57	49	70	82	75	38	49	58	80	70	60	79	78	56	78	73	60	52	66	63	69	76
	Minimum	25	30	28	19	36	56	35	25	25	43	24	33	54	36	28	20	33	34	41	38	44	45	30	43	53	44	37	33	34	49	45
Jackson	Maximum	34	35	32	45	68	82	70	70	66	56	84	70	82	70	70	66	56	84	75	56	82	72	52	82	75	75	57	52	62	70	78
	Minimum	31	29	20	17	32	44	32	26	22	32	31	33	44	32	26	22	32	37	35	36	40	42	24	42	56	49	36	35	42	34	39
Marble Hill	Maximum	25	35	32	50	60	75	62	53	56	52	50	69	75	75	39	47	55	70	55	55	80	55	50	79	70	60	53	55	62	70	80
	Minimum	20	22	20	15	35	55	35	24	20	38	23	33	55	35	26	19	25	35	35	35	50	41	25	42	59	47	38	37	40	35	40
Poplar Bluff §§	Maximum	37	33	35	36	54	67	76	59	53	56	56	47	69	81	58	39	50	67	78	57	60	81	62	57	70	62	58	56	61	65	71
	Minimum	24	30	26	20	31	44	36	25	24	43	26	31	45	51	28	20	31	34	34	39	45	57	23	28	54	46	41	37	37	39	40
Ozark Plateau.																																
Birchtree	Maximum	32	35	31	56	73	80	60	44	57	53	50	77	84	73	33	53	61	81	65	64	84	78	54	77	68	55	44	67	66	69	71
	Minimum	25	27	21	15	35	42	33	21	27	42	22	33	54	30	23	18	30	36	37	37	42	40	27	44	59	39	33	30	33	41	49
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	35	33	30	57	65	65	48	42	57	52	50	78	82	69	35	56	65	63	67	72	87	82	58	82	70	56	51	62	67	59	51
	Minimum	25	23	10	9	30	43	32	20	25	28	22	42	50	29	22	21	30	36	30	42	40	27	27	47	53	40	34	32	34	45	42
Fruit City	Maximum	31	32	31	54	62	80	62	43	54	53	48	75	84	77	65	57	80	56	61	81	74	51	71	76	59	45	62	61	65	66	68
	Minimum	30	29	20	20	34	40	31	21	27	33	25	34	68	32	29	29	37	35	35	51	39	28	43	54	42	35	35	32	36	43	45
Gano	Maximum	35	34	28	65	63	71	55	41	58	50	50	79	83	71	32	51	63	75	60	68	85	77	55	82	72	58	42	61	70	72	63
	Minimum	25	26	16	14	30	31	36	19	26	34	20	35	54	28	22	18	30	42	32	39	53	36	25	46	52	41	32	30	33	43	48
Hollister	Maximum	40	44	50	60	64	82	62	58	52	62	64	66	79	54	56	58	78	82	60	72	88	70	68	80	62	54	54	70	76	74	70
	Minimum	30	28	24	42	50	56	58	28	32	44	30	46	49	50	32	28	38	48	44	46	42	50	42	50	54	40	36	36	38	46	54
Ironton §§	Maximum	35	35	28	53	62	81	58	42	56	47	49	75	83	41	34	49	58	79	55	60	84	53	55	80	64	57	45	58	76	71	70
	Minimum	23	28	23	9	25	52	31	21	18	40	19	34	55	39	23	15	25	31	31	34	45	40	23	44	55	47	33	34	38	35	41
Lebanon §§	Maximum	36	32	32	62	70	73	55	45	59	50	58	79	84	48	38	59	73	83	65	72	82	52	57	79	63	42	48	70	75	72	71
	Minimum	25	26	16	15	32	39	38	21	23	32	20	23	40	38	29	23	27	36	33	41	45	49	32	33	54	40	34	31	35	38	47
Mountain Grove §§	Maximum	34	36	34	55	66	72	51	44	48	54	56	74	82	43	35	52	64	81	60	67	89	50	55	74	72	47	45	64	72	64	65
	Minimum	24	24	24	16	19	36	38	23	17	23	20	27	51	43	28	20	24	35	36	39	40	48	28	30	37	38	35	34	37	42	41
Neosho	Maximum	35	35	34	61	70	70	58	47	60	57	57	80	81	78	41	62	80	79	74	75	91	89	61	78	74	45	55	70	82	78	71
	Minimum	27	28	13	22	36	54	31	26	30	43	22	37	65	37	30	24	40	58	45	45	47	44	37	51	43	35	36	30	43	51	53
Rolla §§	Maximum	33	32	26	56	64	75	49	47	58	44	50	80	81	38	33	55	63	70	58	70	88	50	55	80	65	43	40	61	68	70	63
	Minimum	25	27	19	9	26	36	36	19	20	26	20	22	42	32	25	21	25	33	33	37	42	49	25	29	52	35	36	32	32	35	48
Springfield	Maximum	34	31	26	56	68	69	46	41	56	53	51	76	78	65	34	58	73	74	61	72	88	73	52	77	65	41	50	65	71	69	66
	Minimum	24	26	11	21	41	42	30	23	30	30	26	42	62	32	28	25	41	49	39	44	58	36	33	48	41	36	33	36	42	47	51
Southwest Plain.																																
Amoret	Maximum	35	35	33	56	67	67	59	46	62	60	56	82	86	86	45	66	80	76	67	76	95	85	56	75	63	59	69	66	76	75	65
	Minimum	25	22	3	16	32	44	36	21	29	32	21	38	49	35	26	25	30	45	31	41	45	38	32	45	46	35	34	31	40	50	47
Clinton	Maximum	36	36	30	52	68	65	49	43	59	55	51	77	83	72	41	60	74	68	67	72	82	77	59	78	72	60	58	65	73	73	70
	Minimum	28	26	12	15	31	46	36	23	29	31	36	38	50	35	27	25	34	46	31	46	57	41	31	54	58	34	33	34	35	50	50
Harrisonville §§	Maximum	33	33	28	52	63	58	44	40	59	42	52	79	80	39	38	61	70	64	51	74	90	47	56	74	53	40	58	62	69	64	54
	Minimum	29	33	5	5	28	36	40	22	32	33	22	22	45	37	27	27	31	42	32	45	47	45	31	33	47	35	34	33	35	40	48
Lamar §§	Maximum	35	33	34	58	72	64	51	48	61	47	55	80	85	40	40	63	81	76	65	74	92	53	57	78	64	42	61	63	73	71	68
	Minimum	25	27	9	9	34	46	37	24	28	34	23	24	53	38	32	26	33	44	38	43	48	47	36	42	52	38	35	33	35	46	51
Lamonte	Maximum	35	31	31	32	48	60	51	47	58	51	48	75	79	65	54	56	66	63	66	64	85	68	57	89	53	55	55	63	65	63	57
	Minimum	27	15	6	13	25	35	32	30	28	30	20	41	41	26	23	28	30	32	39	41	42	25	26	43	41	38	33	29	37	47	47
Marshall	Maximum	32	33	31	47	52	58	48	40	55	50	....	75	76	74	36	56	59	66	59	72	85	74	56	79	70	54	55	62	63	....	67
	Minimum	29	26	8	10	31	38	31	20	27	30	....	....	41	33	27	22	30	33	28	38	44	38	29	42	50	38	32	33	35	....	43
Warrensburg	Maximum	33	33	28	52	57	60	46	43	59	49	57	77	83	72	49	61	70	65	53	73	90	81	58	77	68	54	52	62	67	70	58
	Minimum	26	26	7	15	31	41	33	20	29	30	21	41	41	35	26	25	30	34	29	42	46	39	32	47	51	35	33	34	30	47	48
Warsaw	Maximum	38	35	32	57	72	70	49	42	60	50	52	73	82	75	48	62	73	76	65	75	90	86	60	82	75	61	48	65	72	74	68
	Minimum	29	27	10	9	29	49	37	27	40	28	19	36	39	32	27	20	33	37	35	48	44	40	28	51	48	43	38	28	37	53	51
Northwest Plateau.																																
Avalon	Maximum	35	31	28	49	50	51	45	40	56	53	48	75	76	67	40	54	60	63	58	74	83	77	55	74	69	50	57	63	63	62	57
	Minimum	30	28	6	20	31	43	30	19	30	22	25	40	40	36	26	26	31	32	26	45	46	40	30	40	50	40	40	48	39	45	49
Grant City	Maximum	42	31	29	51	48	42	45	39	59	54	50	79	75	54	57	55	54	59	52	75	77	74	55	62	61	45	50	65	61	50	54
	Minimum	27	15	1	10	26	33	19	16	27	23	18	36	32	33	20	24	23	30	25	37	40	34	24	40	34	34	31	31	42	34	43
Kansas City	Maximum	34	29	24	51	58	62	46	42	60	55	53	80	79	45	39	61	67	62	56	76	89	55	55	73	59	42	61	63	65	58	54
	Minimum	27	20	6	21	36	45	29	24	33	30	28	45	41	35	26	29	33	38	33	46	52	40	35	48	42	35	35	40	42	48	42
Kidder §§	Maximum	32	28	28	50	49	49	38	39	57	38	50	78	76	38	38	56	58	62	50	74	84	37	54	67	52	40	69	64	61	58	55
	Minimum	28	21	8	28	31	37	34	18	30	26	21	41	37	34	24	26	28	32	29	40	42	37	28	42	52	36	33	31	37	44	46
Lexington §§	Maximum	32	31	24	48	55	58	42	42	57	42	50	77	77	39	40	57	60	65	56	74	87	49	56	75	54	41	57	63	63	65	54
	Minimum	25	25	7	15	34	37	38	20	29	30	21	41	39	35	26	25	31	30	30	42	46	39	29	45	47	38	35	33	38	46	47
Maryville §§	Maximum	33	28	27	57	51	50	35	39	62	38	54	81	72	37	39	58	56	62	52	78	82	50	58	64	44	49	45	68	64	54	52
	Minimum	15	15	-2	-2	25	31	30	16	16	21	19	21	32	32	21	21	24	28	24	30	38	35	26	26	37	33	29	28	29	37	41
Oregon	Maximum	31	26	25	51	52	48	38	39	60	54	52	78	73	55	34	54	58	61	50	78	84	74	54	65	62	47	60	64	63	57	51
	Minimum	23	15	0	18	31	31	22	18	27	26	20	38	33	33	22	29	28	32	27	40	46	35	29	43	31	32	29	32	39	44	40
St. Joseph	Maximum	33	28	26	53	54	50	40	39	61	49	55	81	76	40	38	58	61	64	54	78	88	51	53	67	58	44	64	65	63	59	53
	Minimum	23	15	4	21	34	35	28	21	30	26	24	42	38	35	23	29	30	34	30	42	47	37	31	46	35	35	33	32	41	45	43
Trenton	Maximum	34	32	28	48	47	50	47	48	49	51	47	71	70	67	39	48	53	57	52	71	76	75	54	68	67	48	57	59	60	61	58
	Minimum	28	22	7	22	29	32	30	18	28	25	21	36	39	33	23	27	30	31	28	39	44	36	28	40	45	36	34	31	45	46	45

[1], [2], [3], etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
H.H.F.

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

APRIL, 1916

BY

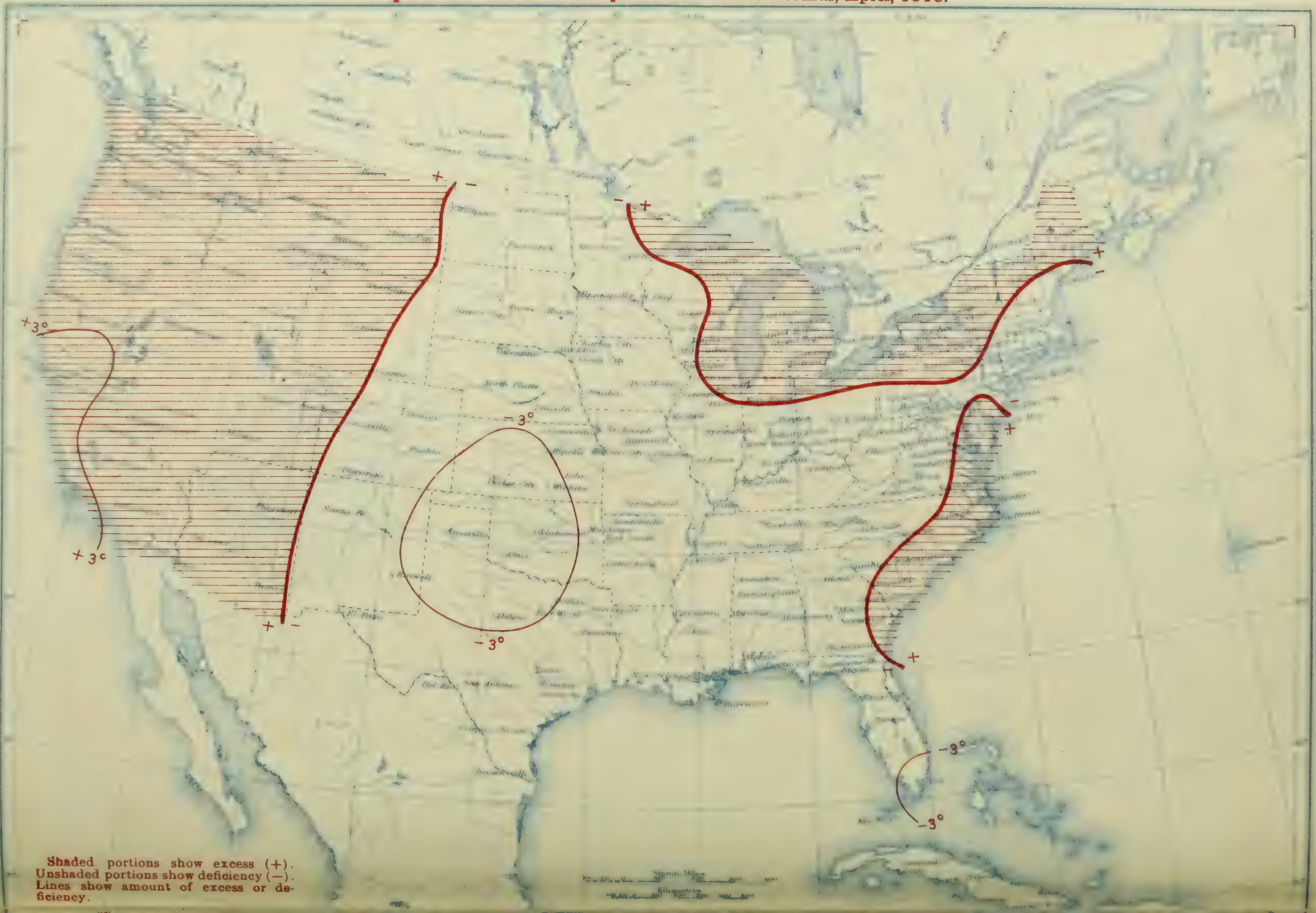
GEORGE REEDER

SECTION DIRECTOR

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 24 1916

Departure of the Mean Temperature from the Normal, April, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Section Director.

. XX. COLUMBIA, MO., APRIL, 1916. No. 4.

GENERAL SUMMARY.

pril, 1916, was characterized by much cloudiness, frequent ipitation, and uniformly low mean temperature. The pre- ation was not heavy, in fact it was generally below the age for April, but the wet spells followed each other so close- nat farm work was very much delayed. All grasses made l growth.

xcept from about the 10th to the 13th, and 18th to the , mean temperatures were below the normal. The defi- y, however, was less marked in the southeast lowlands in the other divisions. As a general rule one may expect v days of summer-like weather in April, but the current th was an exception. On the other hand, save for two or days during the first decade, there was no cold weather; after the 10th there were no freezing temperatures or killing s. From a physiological point of view, however, the month disagreeable, and fires were constantly required for person- mfort.

ne precipitation was below the average in all divisions, the iency being somewhat more marked over the eastern than the western half of the State, which is contrary to the usual. neral snowstorm occurred on the 8th. The fall was heavier ne Ozark hills than elsewhere, covering the ground to hs varying in amounts from 5 to 12 inches. Most of the disappeared within a few hours after falling.

nunderstorms occurred on several days. During the after- and evening of the 19th storms of a violent character, ev- ce being sufficient to place them as true tornadoes, occurred few of the central and southwestern counties. The first d from southwest to northeast across parts of the counties ates, Vernon and St. Clair between 4.30 and 5.00 p. m. e persons were killed, and seven were injured. The second ado moved from southwest to northeast across parts of Mor- Miller, Moniteau and Cole counties at about 7.00 p. m. to p. m. Two persons were killed, and sixteen injured. It been estimated from the newspapers, and other sources, the damage by the wind, and hail, which was a marked ire in both instances, will exceed a half million dollars.

ne stream flow was above the average, but no damaging ls occurred.

TEMPERATURE.

ne monthly mean, as determined from the records of 67 ons was 53.5°. The mean departure from the normal for tations having 10 or more years' record was minus 1.8°. mean temperature and departure from normal for each sion were as follows: northeast plain 52.4°, or 1.9° below nal; southeast lowlands, 57.4°, or 0.9° below normal; k plateau, 54.6°, or 1.8° below normal; southwest plain, °, or 2.6° below normal, and northwest plateau, 51.1°, or below normal. The highest temperature recorded was 93°, ouston on the 23d, and the lowest was 21°, at Tarkio on th. Temperatures were 32° or lower on an average of days, and they were 90° or higher (two stations) on two . There were no freezing temperatures or killing frosts the 10th.

PRECIPITATION.

ne average precipitation for the State, 80 stations report- was 3.23 inches. The departure from the normal for 68 ons having 10 or more years' record was minus 0.69 inch. average for the northeast plain was 2.45 inches, or 1.29 es below normal; southeast lowlands, 2.98 inches, or 1.45 es below normal; Ozark plateau, 4.10 inches, or 0.25 inch below normal; southwest plain, 3.64 inches, or 0.12 inch below normal, and northwest plateau, 3.05 inches, or 0.29 inch below normal. The greatest local monthly amount was 5.65 inches at Hollister, and the least was 1.20 inches at Vandalia. A snowstorm prevailed on the 8th, the average depth for the State being 1.5 inches. In several of the central Ozark counties tha fall exceeded 6 inches, and in two counties, Pulaski and Laclede, it was 9 and 12 inches, respectively. As a rule the snow melted within a few hours after falling.

The average number of days with 0.01 inch or more precipitation was 10.

WIND.

The prevailing winds were from the northwest. The average wind movement did not differ much from the normal; fresh to strong gales, however, prevailed on the 19th, and 21st. During the afternoon and evening of the 19th violent local storms occurred in several of the southwest, and central counties. Five persons lost their lives, and 16 or more were more or less seriously injured. It is estimated that the property loss, including houses, animals, farm machinery, and orchard trees, will exceed $500,000.

SUNSHINE AND CLOUDINESS.

The average percentage of the possible amount of sunshine was 63, or about 12 per cent less than the normal.

MISCELLANEOUS PHENOMENA.

Frost, killing—9th. Hail—18th, 19th, and 20th. Halos, lunar—9th, 10th, 11th, 12th, 14th, and 17th. Halos, solar—1st, 2d, 4th, 6th, 9th, 10th, 12th, 14th, 23d, and 29th. Thunderstorms—15th, 18th, 19th, 20th, 25th, and 30th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean Relative Humidity.		Sunshine.		Wind.				
								Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.98	80	......	168	42	6,650	9.2	38	w.	19
Hannibal	29.98	74	......	......	......	7,531	10.5	38	w.	19
Kansas City	29.99	76	60	214	54	8,960	12.4	43	nw.	21
St. Joseph	29.99	80	53	202	51	6,945	9.6	39	nw.	21
St. Louis	29.98	75	59	202	51	10,508	14.6	52	sw.	19
Springfield	29.99	79	65	210	53	8,600	11.9	40	sw.	19
Cairo, Ill	29.99	......	......	......	......	8,291	11.5	34	s.	19
Keokuk, Iowa	29.98	78	60	243	56	6,184	8.5	46	sw.	19

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	57.9	+2.8	91	20	1.83	−1.89	.....	.....	5	....	....	.....
1889	55.7	+0.6	90	26	2.52	−1.20	.....	....	8	....	....	....
1890	56.2	+1.1	93	24	3.17	−0.55	.....	.....	8	....	....	....
1891	56.8	+1.7	93	15	3.90	+0.18	.....	.....	9	....	....	....
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	.....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	.....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	14	8	8
1896	61.9	+6.8	92	17	3.51	−0.21	3.00	0	9	11	12	7
1897	54.4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T.	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	0.7	9	11	10	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	4.35	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	1.2	9	11	10	9
1904	49.0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	54.9	−0.2	92	20	3.19	−0.53	4.00	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.48	2.45	0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	52.5	−1.6	89	20	4.99	+1.27	4.27	T.	10	12	8	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6
1916	53.5	−1.8	93	21	3.23	−0.69	2.35	1.9	10	11	8	11

Climatological data for April, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	....	.....	....	....	....	....	....	1.85	−2.15	0.34	2.8	8	16	3	11	sw.	C. Randecker.
Brunswick	Chariton	652	36	52.0	−2.4	81	12	29	6†	38	2.93	−0.27	1.53	T.	12	13	4	13	nw.	Louis Benecke
Columbia	Boone	784	26	52.9	−1.4	84	12	30	9	32	2.68	−1.02	0.98	1.0	14	5	8	17	nw.	U. S. Weather Bureau.
Fayette	Howard	725	31	52.0	−3.1	80	11†	29	9	40	2.36	−1.09	0.49	T.	9	....	....	....	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	53.4^{a}	−0.7	84	12	29	9	41	2.59	−1.59	0.60	T.	11	7	9	14	ne.	Dr. C. W. Knapp.
Gorin	Scotland	700	27	....	.....	....	....	....	....	....	3.03	−1.04	0.94	1.5	9	2	12	16	nw.	J. W. Pulham.
Hannibal	Marion	534	23	51.8	−1.8	84	12	28	6	31	1.64	−1.61	0.96	T.	16	8	9	13	sw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	....	.....	....	....	....	....	....	1.37	−2.43	0.33	....	12	9	4	17	nw.	C. T. Mauslund
Jefferson City	Cole	628	30	53.6	−3.3	84	12	29	9	39	3.31	−0.28	0.84	T.	13	18	6	6	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	.....	....	....	....	....	....	4.59	......	1.75	0	7	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	54.2	+0.8	85	12	28	6	40	1.28	−1.73	0.38	0.1	15	11	10	9	nw.	J. T. Farrell
Macon	Macon	881	18	50.4	−3.8	81	12	25	6	40	2.76	−0.03	0.80	T.	9	7	10	13	nw.	John A. Cook.
Mexico	Audrain	797	38	52.1	−2.2	83	11	28	6†	42	1.85	−1.64	0.35	1.0	9	11	1	18	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	54.2	−1.8	85	12	28	9	35	2.14	−2.06	0.59	4.0	11	3	14	13	sw.	E. E. Stenes
Palmyra	Marion	652	4	50.8	.....	83	12	25	6	41	2.96	−0.64	1.20	T.	11	8	12	10	nw.	W. B. Markell.
St. Catherine	Linn	914	3	50.8	.....	79	12	25	6†	29	4.41	......	1.28	1.0	14	8	15	7	n.	L. D. Baker.
St. Charles	St. Charles	614	38	54.1	−1.3	85	12	29	9	36	2.55	−0.85	0.64	1.0	9	9	7	14	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	54.4	−1.7	85	12	30	6	32	1.78	−1.74	0.52	0.5	13	8	9	13	nw.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	53.9	.....	87	12	30	6	32	2.26	......	0.63	2.8	14	9	11	10	n.	St. Louis University.
Steffenville	Lewis	576	23	52.1	−0.6	82	11†	24	6	34	2.51	−1.12	0.52	T.	11	3	15	7	ne.	Frank Hall.
Unionville	Putnam	1,072	23	48.1	−2.8	82	12	20	6	45	2.18	−1.48	0.60	0.5	9	8	6	16	n.	Geo. W. Davis.
Vandalia	Audrain	796	5	....	.....	....	....	....	....	....	1.20	......	0.70	....	3	....	....	....	.....	C. B. Ellis.
Warrenton	Warren	865	25	52.2	−2.5	87	12	29	6†	44	2.18	−1.71	0.53	4.0	13	5	11	14	nw.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	3.12	−0.63	1.30	1.0	9	13	3	14	w.	D. L. Albert.
Cardwell	Dunklin	225	5	59.2	.....	84	18	33	10	39	3.90	......	2.20	0	6	10	14	6	sw.	F. E. Tate.
Caruthersville	Pemiscott	220	25	59.2	−0.5	82	22†	32	9	34	2.91	−0.96	1.68	T.	4	22	1	7	e.	H. E. Averill.
Doniphan	Ripley	440	11	57.8	+0.2	85	21	32	9	40	4.01	−1.37	0.90	T.	10	17	5	8	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	56.2	−0.3	83	12	29	9	43	2.64	−1.90	1.40	T.	7	9	11	10	n.	L. M. Bean.
Marble Hill	Bollinger	420	24	56.4	+0.3	89	9	33	7	49	2.73	−1.91	1.35	T.	6	14	11	5	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	.....	....	....	....	....	....	2.76	−1.61	1.10	0	9	19	2	9	ne.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	....	....	....	....	....	....	3.06	......	1.55	1.0	4	17	1	12	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	56.2	−3.7	83	22	32	9	42	3.38	−1.05	1.21	T.	9	17	3	10	....	Albert E. Cox.
Sikeston	Scott	328	15	57.7	−0.4	82	12†	31	9	41	2.56	−1.67	1.38	T.	6	15	10	5	n.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	56.6	−1.7	78	19	34	8	29	1.66	−1.91	1.05	0	9	9	8	13	s.	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	....	.....	....	....	....	....	....	4.09	+0.37	0.65	4.5	13	15	2	13	se.	G. V. Randolph.
Bagnell	Miller	594	....	....	.....	....	....	....	....	....	2.95	−0.85	0.46	....	11	10	7	13	e.	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	54.6^{a}	−2.4	82	12	29	9	34	3.67	−1.02	1.42	T.	6	17	6	7	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	54.6	−1.5	83	11	27	9	37	2.57	−1.27	0.77	0.8	9	11	10	9	ne.	A. C. Fink.
Cassville	Barry	1,500	5	54.4	....	79	3	30	8	36	5.70	......	1.67	2.0	8	12	9	9	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	56.4	....	83	12†	30	8	38	2.38	......	0.96	9.0	8	18	6	6	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	56.0^{c}	−1.3	81	18	31	8	39	3.29	−0.96	0.66	T.	12	11^{d}	3^{d}	12^{d}	s.	H. E. Dean.
Eldon ††	Miller	934	15	51.8^{a}	.....	80	18	28	6†	37	2.50	−2.23	0.40	5.0	11	9^{d}	12^{d}	8^{d}	ne.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	57.3	.....	82	12	30	9	35	3.42	......	1.30	T.	7	19	8	3	w.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	54.6	−1.8	85	12	28	9	38	4.70	−0.39	1.39	6.3	10	12	8	10	nw.	A. C. Leach.
Goodland	Iron	1,000	11	53.0	−1.7	83	12	29	9	49	4.83	−1.28	2.00	4.0	7	17	9	4	s.	F. M. Adams.
Hollister	Taney	1,000	7	56.4	.....	82	23†	30	9	36	5.65	+1.91	1.40	1.5	8	16	0	14	nw.	W. P. Chapmann.
Houston	Texas	1,280	23	55.8	+0.2	93	23	28	9	44	4.86	+0.10	1.37	8.0	8	12	5	13	sw.	R. F. Harmon.
Ironton	Iron	925	38	53.8	−1.6	84	12	29	9	44	3.80	−0.58	1.30	4.5	12	4	15	11	nw.	W. H. Delano.
Koshkonong	Oregon	911	15	57.5	−0.5	82	12†	31	9	36	3.97	−1.07	1.44	T.	7	12	6	12	ne.	R. M. Hitt.
Lebanon	Laclede	1,265	27	53.1	−3.4	85	11†	24	9	45	4.97	+0.36	1.00	12.0	11	10	5	15	s.	Earl J. Breech.
Lockwood	Dade	1,088	21	54.8^{a}	−1.6	80	11†	28	9	33	4.50	+1.04	1.30	3.0	9	8	6	16	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	52.4	−2.4	83	12	26	9	39	4.07	−0.35	0.92	4.0	8	6	9	15	sw.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	J. R. White & Son.
Neosho	Newton	1,083	33	55.3	−2.8	81	18†	26	9	39	4.97	+0.74	1.35	T.	13	12	3	15	s.	W. O. Buck.
Rolla	Phelps	1,139	34	53.3	−2.1	87	12	28	9	45	4.05	−0.32	0.61	6.0	14	7	12	11	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	52.8	−2.9	80	18	28	9	29	5.15	+1.29	1.44	5.2	14	12	10	8	s.	U. S. Weather Bureau.
Wheatland	Hickory	920	23	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	53.8	.....	84	12	26	9	39	3.58	......	0.85	8.0	11	6	10	14	ne.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	....	.....	....	....	....	....	....	.....	......	....	....	....	....	....	....	.....	E. F. Hirni.
Clinton	Henry	800	29	54.6	.....	85	18	28	9	44	3.66	−0.55	0.57	0	10	4	15	11	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	52.0	−2.0	82	11	32	7†	43	2.55	−0.98	0.66	5.0	13	6	3	21	e.	A. J. Sharp.
Lamar	Barton	964	35	53.2	−3.7	82	11	27	9	40	3.59	−0.52	0.60	T.	13	16	2	12	ne.	Dick B. Houston.
Lamonte	Pettis	863	27	52.4	.....	79	11†	28	9	32	2.99	−0.64	0.65	T.	10	9	13	8	ne.	J. Ed. Hall.
Marshall	Saline	779	25	52.6	−1.4	81	12	28	9	41	4.25	+0.49	0.89	1.0	12	5	13	12	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	54.2	.....	80	11†	28	9	36	3.71	−0.09	0.90	7.0	9	9	12	9	ne.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	.....	....	....	....	....	....	4.24	+0.36	0.81	....	12	10	3	17	sw.	W. E. Mathews.
Warrensburg	Johnson	883	37	54.0	−2.0	82	11	29	9	31	3.84	+0.89	1.00	T.	12	5	11	14	ne.	Geo. H. Collins.
Warsaw	Benton	883	11	52.4	−3.7	84	13	31	8†	40	4.35	−0.01	0.69	6.8	12	9	15	6	ne.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	.....	....	....	....	....	....	3.57	......	0.94	....	13	10	9	11	nw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	53.2	+0.3	82	12	28	6†	29	3.43	−0.43	1.50	2.0	6	13	8	9	nw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	47.8	−3.1	81	12	22	4	33	2.85	−0.20	1.40	1.0	9	3	14	13	nw.	M. H. Moulton.
Chillicothe	Livingston	....	1	....	.....	....	....	....	....	....	2.50	−2.77	0.61	....	10	14	1	15	....	Hocey O. Dupy.
Conception	Nodaway	982	31	49.9	−2.1	88	12	23	6	38	2.37	−0.38	0.92	T.	6	2	16	12	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	50.5	−1.1	88	12	23	6†	46	2.64	−0.31	1.06	T.	6	11^{a}	6^{a}	12^{a}	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	52.6	−1.7	80	11	30	7	29	4.16	+0.87	2.32	4.1	11	7	11	12	n.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	50.8	−1.8	83	12	25	9	38	1.78	−1.30	0.44	2.0	11	13	7	10	nw.	J. F. Sharp.
Lexington	Lafayette	813	34	53.2	−1.0	82	12	28	9	30	3.19	−0.09	0.82	2.0	8	13	1	16	n.	J. W. Keithley.
Liberty	Clay	864	27	53.6^{a}	−1.4	82	12	26	9	34	4.32	+1.14	2.35	1.5	9	10^{a}	14^{a}	5^{a}	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	48.8	-2.1	90	12	22	9	51	2.55	−0.63	0.65	1.0	10	15	4	11	nw.	J. R. Brink.
Oregon	Holt	1,113	60	49.8	−2.9	85	12	23	9	35	3.62	+0.38	1.30	T.	8	5	17	8	ne.	Tom Curry.
St. Joseph	Buchanan	967	11	51.8	.....	85	12	28	9	31	2.96	−0.17	1.67	1.4	10	8	9	13	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	50.6	.....	89	12	21	9	41	3.26	..	1.09	0.3	10	13	10	7	nw.	John F. Frazier.
Trenton	Grundy	812	21	51.7	−1.1	81	12	27	6	29	3.12	+0.18	1.78	T.	7	8	13	9	nw.	W. H. Estes.
State means and extremes		....	....	53.5	−1.8	93	23	21	9	51	3.23	−0.69	2.35	1.9	10	11	8	11	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for April, 1916.

Stations.	Watershed.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
lle	Missouri	.26	T.		T.			T.	.26	.02	T.			T.	.12	T.	.34		.20	27	.19	.10					.09	T.					1.85
ick	Grand	.27							.29					T.	.27	T.	.94	.03	.17	.19	.47	.05				.03		.10			.12		2.93
na***	Missouri	.15	.06		.01	.01		.24	.09					.13	T.	.47	.07		.48	.26	.04				T.	.07	T.			T.	.60		2.68
e	do					T.			.24					.28		.20	.27		.49	.33	08					.07					.40		2.36
	do	.27	.19		T.			T.	.28		T.			T.	.14		.36		.60	.01	.50					.14	.05				.05		2.59
	Mississippi								.15					.40		.01	.36			.46	.55				.05	.11					.94		3.03
bal***	do	13				T.		.04	.07		05			.21	.02	.08	.05		06	.26	.14	.02			.03	05	.02				.41		1.64
an	Missouri	.04	26	.09			T.		.23	T.	T				.04		.04		.33	.01	.08	.17	T.	T.			.06	.02					1.37
on City	do	.20	.28	.05		.03		T.	.39	.03					.22		.43		.75	.02	.84	.05					.02				**		3.31
ville	Chariton								.20					.25		1.43			.36	.50						.10					1.75		4.59
na	Mississippi	.06	.03			.02		T.	.19		.03			.06	02		T.		.38	.01	.12	.12			.01	.18	.02				03		1.28
	Chariton	.32							.17					T.	.33	.02	.80		.10		.75	.01			T.		.26	T.					2.76
	Mississippi	.25	T.				.01		.25	T.					.10		.36		.05	.35	.31				.17								1.85
d	Meramec	.07	.24					.19	21						.13		.26		.29	.09	.59	T.				.03	.04						2.14
ra	Mississippi	.22						T.	1.20		.18				.16	T	.26			.11	44	.17				.06	.14	.02					2.96
erine	Grand	.18						.20	.05					.54		.19	.77		.36	.36	.37	.03			T.	.06	.01			01	1.28		4.41
rles	Missouri	.31	.28					T.	.45		T.						.31		.27	.15	.64	T.			T.	.13	.01						2.55
us (1)**	Mississippi	.06	.09			T.		.20	.07		.01			T.	.11	39	.01		.24	06	.51	.01			T.	.02	T.						1.78
ns (2)	do	.12	.13			T.		.21	.17		.03			T.	.10	.30	.02		40	.10	.63	.02			T.	.02	01						2.26
ville	do	.45						T.	.25		.02			.25			.35		.12	.05	.32	T.			.03	.15		T.			.52		2.51
ville	Grand	.30							.30						.34	T.	.55			.35	.25	.05	02								.02		2.18
ia	Mississippi		.35	.15												T.		.70					T.										1.20
ton	do	.11	.18	.06	.01				.30	T.	.02				.11		.18		.08	.32	.53	.19					.07	.02					2.18
est Lowlands.																																	
irardeau	Mississippi		.10	.30			.35		.35	.25							02				.40	1.30					.05						3.12
ell	do		1.03	.20		.10		.22	.15												2.20						T.						3.90
ersville	do		.73			T.		.40	.10		T.				T.		T.			T.	1.68			T.			T.						2.91
an	Black	T.	.82	.03		.35		.63	.68		.05						.25				.90			.10	.20								4.01
n	Mississippi		.27			.53		.10	.22		.04					.08					1 40												2 64
Hill	do		25			.60		.10	.25								.18				1.35												2.73
adrid	do		.16	.56			31		.41	.06		.04					.02					1.10			.10								2.76
(near)	do		.54			.55					.42										1 55												3.06
Bluff	Black		.30	.23		T.	.35		.70	.04							.19				.25	1.21			11								3 38
n	Mississippi		.31	.18		.22		.27	.20												1.38						T.						2.56
ill.**	do	T.	.20	.01	T.	.08		.18	.09		.02			T.		02					1.05					.01	T.						1.66
Plateau.																																	
on	Gasconade	.25	.36	.16		65		.12	.65	.15					.10		.35				.58	.62						.06	.04				4.09
l	Osage	T.	.44	T.		41	.07	.20	.46	.04					.34		.46				.41						.06		.06		T.		2.95
ree	Black		.92			.38		.23	.17								.55				1.42												3.67
r	Osage	.17	.48			.77		.20							.50	.60				12	.35					.38							3.57
le	White	1.67						1.17	.16							.29				.73	1.08			.53		.07		T.					5.70
r	Gasconade	.56	.21		T.	.37		.04	.06					T.		.09			T.	.96							T.				.09		2.38
	Neosho	.55	.51		.02	.66		.57	.12						.08	.22				.17				.32		.05	02						3.29
	Osage	.26	.27			.30		.29	.10					.11	.15	.40	.15				.35					T.					.12		2.50
ity	Black		.70	.05		.40		.30	.37								.30				1.30	T.											3 42
	Meramec	.08	.72			.87		.74	.12						.03		.50			.17	1.39					.08							4.70
nd	Black	.13	.78			.70		.04	.77								.41			2 00													4.83
er	White	.70	1.25			.60		.40	10							.60					1.40			.60									5.65
n	Gasconade	T.	.80			.62		.80	.62							.16	.24			.25	1.37			T.		T.							4.86
	Mississippi	T.	.40	.50		.20	.37	T.	.40	.05	.02	.13			T.		35		T.		.30	1.00		T.		T.	08	T.					3 80
mong	Black		1.24			.34		.46	.04								38				1.44			.07									3 97
n	Osage	.20	.80	.10		.90	.10		1.00	.05					.30		.42		T.		.80	.30					T.						4 97
ood	do	.74	.42			.72		.58	.04					.12		1.30				T.	.55					.03							4.50
ain Grove	White	T.	.61			.26	.26	.01	.74	T.					T.		.65				.92	62			T.		T.		T.				4.07
Vernon	Neosho																																
	do	.43	.61		T.	83	T.	.30	20					T.	.20	.64				.03	1 35			.25	09	.03		T.			.01		4.97
	Meramec	.21	.58	.09		.43	.16	T	.61	.02	T.	.02			.18		.45		T.		.61	.57		T.			.05	02					4.05
ield ***	White	.59	.46		12	.70	T.	.44	.09					.05	.08	.48		T.		20	1 41			.05		.01		T.			.47		5.15
land	Osage																																
west Plain.																																	
t	Osage	.24			T.	.40		.40	.40					.32	.23	.35		T.		.13	.25					.01				T.	.85		3.58
on City	do																																
	do		.20			.30		.57						.20	.40	.57				35	.45						.10		.52				3.66
onville	do	.38				.02	.02	.20	.32	.02				T.	.25	.19	66		.03		.21	T.					.05				.20		2.55
	Neosho	.26	.39	.05		.60	.03	.18	.13	T.					.54	.55	.16	T.	T.		.45	T.			T.		03				.22		3 59
te	Missouri	.35						.25	.10					.15		.50	.07		.60	T.	.25	T.				T.	T.	07		T.	.65		2.99
all	do	.48				T.		.25	.35					.20	.08	.50	.50		.45	.05	.40					.10	T.	T.		T.	.89		4.25
	Osage	.38	.10			.72		T.					.40		.20	.50					38							.08			.95		3.71
	do	.33	.19	03		.81		.61	.19	.08					.69	.50	.13				.34										34		4.24
isburg	Missouri	.36				T.		.34	.03					.26	T.	1.00	.18		.27	.10	.34	T.				.12		.03			.81		3.84
	Osage	.28	.15	.07	T.	.48		.28	.43	T.					.63		.68		T.		.69	16					.13	T.			.37		4.35
ly	Missouri	.35					.15	T.	.34	.04					.22	.15	.94		.45	.04	.66	.03					.08				.12		3 57
west Plateau.																																	
	Grand								.10					35		.68			.45		.35										1.50		3.43
y	do	.12							.08					.25		.40	.18		.37	T.	.03	02			T.	T.				T.	1.40		2.85
othe	do								.07					.04	.58		.61		.44	.17	.46	.04					.04				05		2.50
tion	Missouri							T.						.45		.18			.66	.11	.05										.92		2 37
ity	Grand								T.	T.				.27		.61			.31		30				.09	T.	T.			T.	1.06		2.64
City ***	Missouri				.01			.33	.19					.24		.14	32		.38	.18	.01					.04					2 32		4.16
	Grand	.23							.02					.02	.28	.03	44		.40		.06	.05						.05			.20		1.78
ton	Missouri	28					T.		.25	.03					.26	T.	.82		.74		.63						.18				T.		3.19
	do	24						.15	.04					.23		.30	.33		.32		.36										2.35		4.32
lle	do	T.							.16	.07					.39	.05	.24		.42		.46	.04					.07				.65		2.55
	do							T.	.06					.60		.55			.92	.12	.02					.05	T.	T.	T.		1.30		3.62
pu***	Missouri							.02	10					.30		.19	.05		.54	T.	.03					.03		.03		T.	1.67		2.96
	do							.02	.01					.15		01			.88	.22	.81	.01				.06					1.09		3.26
	Grand							.14	T.					.34		.40			.33	.07	.06				T.	T.					1.78		3.12

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xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation.

Precipitation measured in the morning: amount then recorded is for the preceding 24 hours.

Trace, or less than 0.01 inch.

* Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

Precipitation in the next following measurement.

Separate dates of fall not recorded.

Daily temperatures for April, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	60	60	63	62	59	47	39	48	58	67	80	81	67	60	66	62	67	77	74	59	58	68	66	63	57	53	66	69	69	54	....
	Minimum	41	45	38	38	38	29	31	32	29	31	42	52	63	47	44	45	45	45	49	54	42	38	40	44	43	37	38	39	46	50	....
Columbia	Maximum	52	50	61	59	56	45	36	44	50	68	82	84	70	59	68	62	65	79	76	70	55	67	65	61	57	51	61	69	73	61	....
	Minimum	43	43	38	41	39	31	33	33	30	41	50	63	50	46	49	49	40	50	58	48	43	42	41	42	44	39	44	41	51	54	....
Fayette	Maximum	56	53	60	58	55	45	34	44	47	66	80	80	68	58	67	61	67	78	75	60	56	68	64	61	54	50	61	68	70	60	....
	Minimum	42	43	37	39	36	30	31	31	29	40	48	60	50	45	48	49	45	53	56	47	42	41	42	48	45	38	45	40	48	49	....
Hannibal	Maximum	56	53	59	58	59	42	41	42	48	62	80	84	71	58	62	62	66	64	78	66	50	65	63	62	55	54	62	68	72	63	....
	Minimum	43	42	33	40	35	28	32	33	30	38	49	63	50	44	49	48	43	49	54	48	42	41	39	42	42	40	44	40	51	52	....
Jefferson City §§	Maximum	50	48	62	60	54	49	38	43	52	68	83	84	76	58	70	67	68	78	77	63	56	72	65	61	66	58	63	70	72	72	....
	Minimum	43	42	39	42	42	30	32	31	29	37	44	55	65	47	49	50	43	47	49	56	43	42	44	45	43	39	42	42	48	55	....
Macon §§	Maximum	58	58	61	60	58	43	38	47	49	65	80	81	67	59	63	59	66	69	76	60	55	66	69	62	56	52	65	68	69	53	....
	Minimum	40	38	36	35	35	25	27	32	28	29	40	51	41	44	44	47	42	45	48	55	41	40	37	40	42	37	39	41	46	50	....
Mexico §§	Maximum	54	49	62	61	62	45	38	45	51	67	83	76	73	58	65	67	65	76	78	65	54	70	63	63	58	54	63	72	76	75	....
	Minimum	41	41	33	35	40	28	28	32	28	32	41	52	61	45	45	48	42	45	47	58	42	39	37	44	44	31	39	36	46	55	....
Oakfield	Maximum	60	46	62	60	54	51	39	45	52	63	82	85	78	70	65	70	70	72	78	70	54	70	67	63	64	55	61	67	74	78	....
	Minimum	42	41	37	42	46	29	30	30	28	36	47	59	64	47	47	50	45	45	63	52	43	43	42	45	43	41	43	42	48	56	....
St. Catharine	Maximum	58	56	62	60	64	43	38	45	51	63	76	79	72	58	66	66	65	69	72	63	55	66	63	61	56	50	63	67	66	60	....
	Minimum	38	36	36	35	39	25	31	31	25	37	48	59	51	41	45	48	39	45	54	47	40	37	39	42	40	35	42	39	45	47	....
St. Louis (1)	Maximum	62	49	61	59	54	46	41	43	51	60	81	85	75	60	68	68	68	70	76	72	52	69	64	62	64	54	59	66	72	77	....
	Minimum	44	43	40	43	41	30	34	32	32	41	49	60	55	49	48	52	49	48	60	51	44	46	44	49	44	45	46	49	52	56	....
Unionville §§	Maximum	58	60	57	58	52	46	41	47	50	65	80	82	57	62	60	56	66	68	74	60	56	65	62	63	56	53	52	66	55	50	....
	Minimum	34	32	34	31	33	20	23	28	25	26	35	50	56	36	40	42	38	42	46	50	40	35	34	38	40	35	40	38	43	44	....
Warrenton §§	Maximum	49	45	60	60	58	48	37	44	52	56	84	87	76	60	66	65	68	73	78	60	51	69	67	59	60	53	60	71	74	77	....
	Minimum	42	42	37	40	41	29	29	31	29	35	40	51	62	47	46	48	44	47	45	54	42	41	40	44	45	38	40	43	46	52	....
Southeast Lowlands.																																
Cardwell	Maximum	71	60	65	69	64	56	50	52	56	56	79	80	80	74	79	80	76	84	82	77	67	82	76	75	73	68	65	76	73	80	....
	Minimum	56	47	44	44	46	37	38	37	39	33	40	56	62	50	53	55	52	48	64	54	50	46	55	52	44	47	46	43	40	52	....
Caruthersville	Maximum	70	57	64	68	60	57	49	46	54	61	76	78	80	72	78	80	77	81	81	77	65	82	75	75	72	66	66	75	76	82	....
	Minimum	47	47	44	44	46	39	39	35	32	42	46	57	57	58	56	56	51	54	64	54	50	48	56	52	45	46	46	42	46	52	....
Doniphan	Maximum	74	55	66	68	61	55	49	45	53	66	78	79	79	70	74	77	77	80	77	73	85	83	78	76	70	64	64	71	74	78	....
	Minimum	50	42	42	45	43	34	33	33	32	41	41	57	60	56	50	52	43	50	64	54	48	43	52	47	40	44	43	38	40	47	....
Jackson	Maximum	75	54	63	64	58	52	45	49	55	60	80	83	81	75	75	78	72	78	81	76	63	79	72	70	70	70	65	66	75	80	....
	Minimum	50	42	42	36	40	35	34	32	29	37	37	55	61	52	46	46	39	49	63	55	49	40	50	46	36	43	42	36	34	45	....
Marble Hill	Maximum	80	50	65	56	59	50	46	42	89	72	70	70	83	73	70	75	73	79	72	72	78	80	72	65	60	55	60	70	70	75	....
	Minimum	49	25	41	40	40	41	33	35	40	40	41	60	62	51	47	43	53	57	55	52	50	42	45	44	41	43	45	50	40	45	....
Poplar Bluff ‡‡	Maximum	77	60	49	66	68	50	53	40	45	55	65	79	81	80	68	75	78	75	81	78	62	64	83	71	75	77	64	69	70	74	....
	Minimum	56	42	42	45	47	35	37	33	32	40	47	47	54	56	50	51	45	45	55	58	48	41	43	47	41	44	43	39	40	41	....
Ozark Plateau.																																
Birchtree	Maximum	63	46	65	66	56	56	47	40	51	66	80	82	79	70	70	73	69	78	75	70	75	65	....	68	66	56	61	69	70	77	....
	Minimum	45	39	40	44	39	35	31	30	29	40	48	56	60	50	50	50	41	52	63	50	41	52	....	45	45	40	40	38	43	50	....
Cassville	Maximum	63	47	79	77	64	55	51	39	63	71	69	67	68	63	61	69	67	75	68	65	68	77	73	65	66	54	59	64	70	68	....
	Minimum	47	42	44	47	41	38	33	30	35	37	50	53	55	49	49	48	50	51	49	50	38	41	50	49	48	39	40	33	40	41	....
Eldon	Maximum	45	47	59	56	55	47	40	42	50	69	82	75	66	61	70	69	65	80	....	77	57	75	65	62	62	50	60	69	72	70	....
	Minimum	41	40	35	41	29	28	30	30	28	37	45	59	59	45	46	45	43	49	....	49	41	42	43	33	42	37	44	40	45	51	....
Fruit City	Maximum	70	50	64	64	55	51	41	40	50	64	78	82	80	70	70	73	69	78	80	72	66	81	80	70	66	56	60	67	72	78	....
	Minimum	50	40	39	45	49	41	31	32	30	40	49	57	69	60	50	52	56	59	60	54	45	47	45	49	45	40	49	44	56	57	....
Gano	Maximum	68	45	63	55	55	49	42	40	49	68	82	85	79	68	67	70	70	79	76	74	58	78	70	66	65	55	65	69	73	79	....
	Minimum	43	39	38	38	39	32	30	30	28	37	49	58	61	46	49	50	43	54	60	48	45	40	48	45	42	40	41	40	46	53	....
Hollister	Maximum	70	48	66	68	48	56	40	36	52	56	78	76	74	64	74	76	72	74	75	66	64	78	82	76	70	66	64	76	74	82	....
	Minimum	48	44	44	46	42	40	34	34	30	42	50	54	56	48	50	48	44	52	54	52	48	54	50	44	42	44	42	40	52	54	....
Ironton §§	Maximum	52	45	63	63	55	48	36	42	53	65	82	84	78	65	70	73	70	77	75	65	55	79	70	69	67	58	62	69	74	78	....
	Minimum	47	42	41	37	43	34	35	32	29	36	43	57	59	48	47	51	39	50	63	55	47	35	49	40	35	42	43	32	36	42	....
Lebanon §§	Maximum	51	60	63	51	55	52	34	45	49	71	85	85	72	57	78	60	68	85	79	68	62	80	71	68	66	56	60	74	73	81	....
	Minimum	44	39	35	36	40	32	31	30	24	26	41	48	52	45	46	51	41	42	57	54	43	42	44	40	41	38	39	38	39	48	....
Mountain Grove §§	Maximum	55	45	64	65	47	54	36	38	49	67	79	83	74	60	67	70	67	77	71	63	59	79	71	65	66	48	58	65	69	75	....
	Minimum	55	38	42	40	39	34	31	29	26	28	40	52	58	46	47	49	40	46	53	41	42	44	50	42	38	38	39	37	43	48	....
Neosho	Maximum	66	48	62	60	54	54	54	38	51	71	80	79	75	72	66	67	69	81	78	76	64	81	80	65	65	57	58	69	71	74	....
	Minimum	45	42	39	45	40	37	33	31	26	42	45	62	62	48	50	51	40	47	61	53	43	42	54	41	36	38	45	35	46	54	....
Rolla §§	Maximum	48	44	62	61	52	52	34	40	50	69	85	87	73	57	70	69	69	79	75	65	57	77	74	63	65	53	60	71	72	77	....
	Minimum	45	41	32	38	41	31	31	30	28	32	40	50	61	46	47	50	43	45	56	58	44	42	47	43	42	39	40	40	47	57	....
Springfield	Maximum	51	44	59	59	47	51	43	36	46	66	79	79	69	56	66	64	63	80	71	69	59	77	68	61	63	49	55	65	69	74	....
	Minimum	41	39	38	43	36	35	31	31	28	40	51	59	54	46	50	50	45	54	59	47	42	48	51	46	44	37	40	42	48	54	....
Southwest Plain.																																
Amoret	Maximum	56	55	62	60	55	55	48	42	48	70	82	84	76	56	69	65	67	81	76	70	62	79	77	66	61	55	62	68	72	70	....
	Minimum	41	42	35	40	40	33	31	31	26	37	47	60	52	44	46	49	43	53	61	50	41	40	45	41	38	35	45	39	46	47	....
Clinton	Maximum	57	52	64	59	55	50	48	45	59	70	81	79	73	58	69	70	75	85	73	68	63	79	68	67	60	52	65	70	73	68	....
	Minimum	48	43	33	43	43	33	32	33	28	42	50	61	55	45	48	51	52	41	60	50	43	40	45	44	40	32	42	40	48	52	....
Harrisonville §§	Maximum	53	54	60	56	52	46	38	40	50	70	82	79	67	52	70	62	63	81	75	60	63	75	65	64	57	53	64	71	71	54	....
	Minimum	41	45	36	37	40	35	32	32	32	38	39	50	63	44	44	48	40	52	54	52	42	40	44	43	38	37	40	38	42	50	....
Lamar §§	Maximum	47	49	61	57	54	53	35	40	49	69	82	79	68	52	69	66	67	81	75	62	63	79	72	65	66	53	60	69	72	71	....
	Minimum	43	40	38	41	41	36	32	32	27	35	42	53	62	46	48	51	44	50	57	55	43	43	51	44	40	38	43	38	43	53	....
Lamonte	Maximum	50	52	60	59	56	50	36	42	58	67	79	78	68	69	70	62	63	79	76	68	61	70	63	67	57	50	62	69	70	65	....
	Minimum	30	33	35	40	37	34	31	32	28	37	48	62	49	45	47	49	41	50	64	50	42	38	44	40	46	37	44	37	47	50	....
Marshall	Maximum	55	55	61	59	59	50	43	45	50	67	80	81	69	67	68	63	66	77	75	70	58	67	66	63	58	53	64	70	71	64	....
	Minimum	40	43	37	40	45	31	31	30	28	39	39	59	52	43	41	48	41	47	60	47	43	38	41	40	39	36	44	40	46	51	....
Warrensburg	Maximum	59	54	61	58	60	52	42	43	53	70	82	80	70	54	71	64	65	80	74	67	61	75	65	64	58	52	63	74	71	65	....
	Minimum	42	44	36	39	43	34	31	32	29	40	51	61	56	44	47	49	45	49	63	49	42	45	44	44	44	38	45	43	48	51	....
Warsaw	Maximum	68	57	50	60	58	54	50	49	42	52	70	82	84	72	56	71	64	66	82	75	61	63	73	67	67	58	50	61	71	73	....
	Minimum	44	42	38	38	42	34	32	31	31	33	38	42	56	52	43	45	37	40	56	55	45	37	46	39	37	38	39	35	45	53	....
Northwest Plateau.																																
Avalon	Maximum	57	59	61	61	60	46	42	46	50	67	79	82	76	59	65	63	68	72	73	61	57	69	68	64	59	54	62	69	66	63	....
	Minimum	40	40	40	38	42	28	35	35	28	38	50	55	53	43	50	45	50	51	60	48	44	48	43	42	46	36	45	50	45	49	....
Grant City	Maximum	60	55	56	60	51	47	43	43	53	70	84	88	76	61	58	61	68	69	76	61	57	65	63	69	58	54	65	72	62	57	....
	Minimum	33	33	31	31	36	23	30	29	23	32	38	59	49	37	45	43	39	45	59	45	39	39	39	42	40	36	43	40	47	42	....
Kansas City	Maximum	55	53	60	56	57	43	37	39	48	69	80	79	67	54	67	64	63	76	74	58	60	73	62	63	59	51	64	68	67	55	....
	Minimum	41	40	42	40	39	34	30	32	30	40	55	64	51	44	48	48	49	49	58	47	42	50	45	47	45	40	47	47	52	43	....
Kidder §§	Maximum	58	56	58	58	56	43	40	44	45	68	80	83	62	57	63	61	64	75	73	58	58	67	66	62	58	50	64	67	65	48	....
	Minimum	36	36	38	33	42	26	32	31	25	35	42	61	61	40	47	45	40	48	62	51	39	41	39	45	44	38	37	42	43	45	....
Lexington §§	Maximum	58	57	63	60	60	46	39	44	50	68	80	82	68	57	67	64	66	77	74	58	60	69	66	65	55	52	65	69	69	52	....
	Minimum	40	41	35	38	44	33	34	32	28	38	53	62	62	44	49	48	45	48	64	54	42	43	41	55	44	38	46	40	48	50	....
Maryville §§	Maximum	62	58	56	63	53	45	44	39	53	73	84	90	56	62	59	64	67	74	71	53	59	55	65	66	59	51	64	70	63	45	....
	Minimum	32	32	30	29	31	23	25	28	22	28	33	47	54	37	37	42	40	42	47	47	38	38	39	41	42	35	40	36	43	41	....
Oregon	Maximum	56	55	53	57	51	45	42	40	50	70	80	85	70	59	63	64	58	72	74	62	58	63	62	63	59	48	60	65	63	55	....
	Minimum	32	33	33	33	37	26	30	38	23	35	48	59	49	37	45	42	41	45	60	43	37	39	41	32	43	35	43	39	50	41	....
St. Joseph	Maximum	60	56	56	58	56	46	43	38	49	69	82	85	69	59	65	65	65	76	77	55	60	68	65	63	60	50	64	69	68	52	....
	Minimum	36	37	35	34	36	30	33	31	28	38	53	63	49	41	47	45	44	48	55	46	41	41	43	45	44	40	45	40	52	44	....
Trenton	Maximum	57	56	57	58	56	47	44	47	49	65	75	81	79	59	62	61	66	69	73	70	57	63	64	62	59	55	62	67	68	63	....
	Minimum	36	36	39	37	38	27	31	31	28	36	51	59	52	41	40	47	41	47	60	48	42	40	39	45	45	37	45	40	47	45	....

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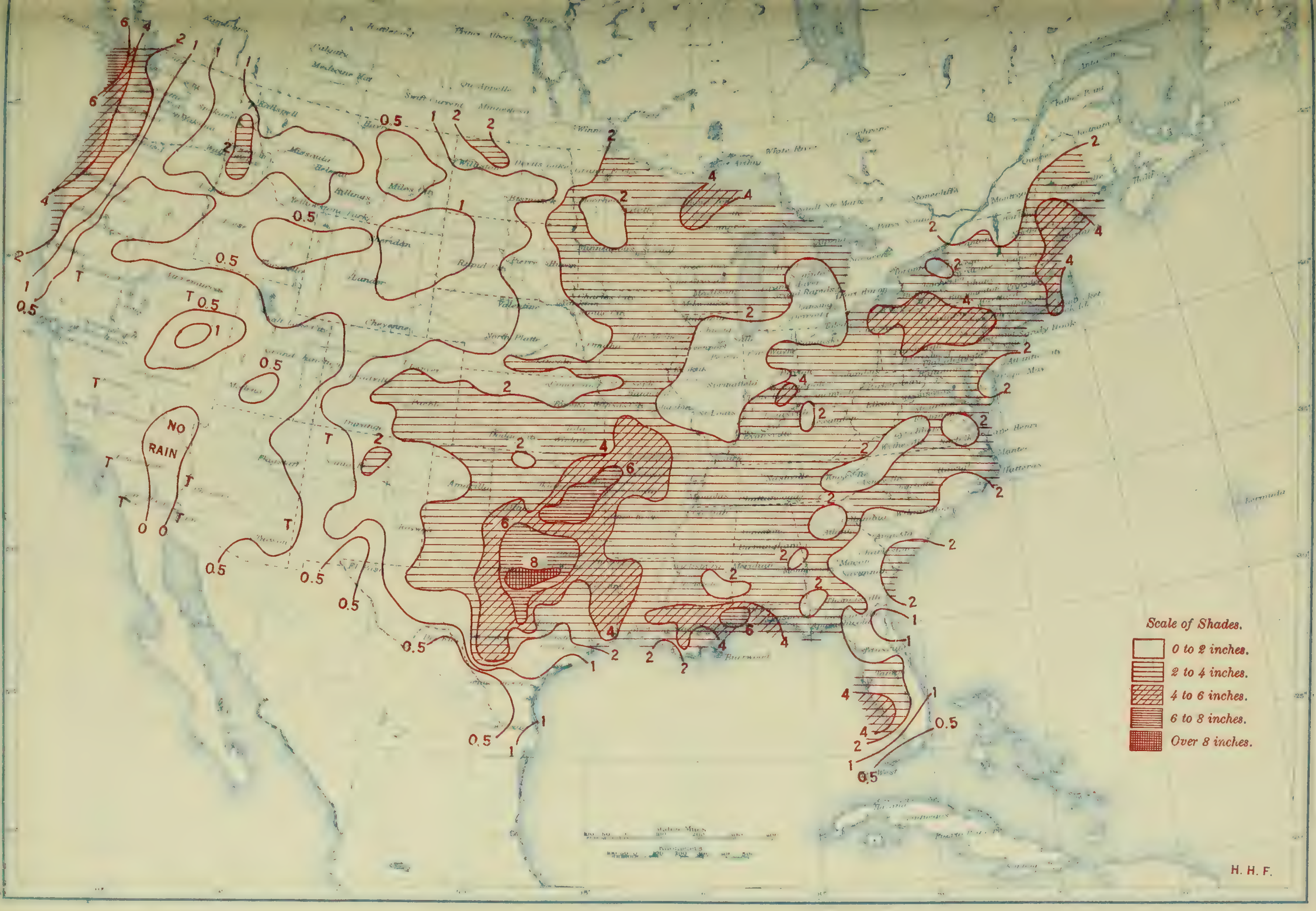
a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning: the maximum temperature then read is charged
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
T
0.5
1
2
4
6
8
Calgary
Medicine Hat
Swift Current
Qu'Appelle
Minnedosa
Kalispell
Missoula
Helena
Billings
Miles City
Williston
Bismarck
Sheridan
Lander
Rapid City
Pierre
Huron
Valentine
North Platte
Cheyenne
Amarillo
St Louis
Springfield
Sandy Hook
Hatteras
Montreal
Quebec
Macon
Savannah
Atlanta
Bermuda
H. H. F.

MS Slack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

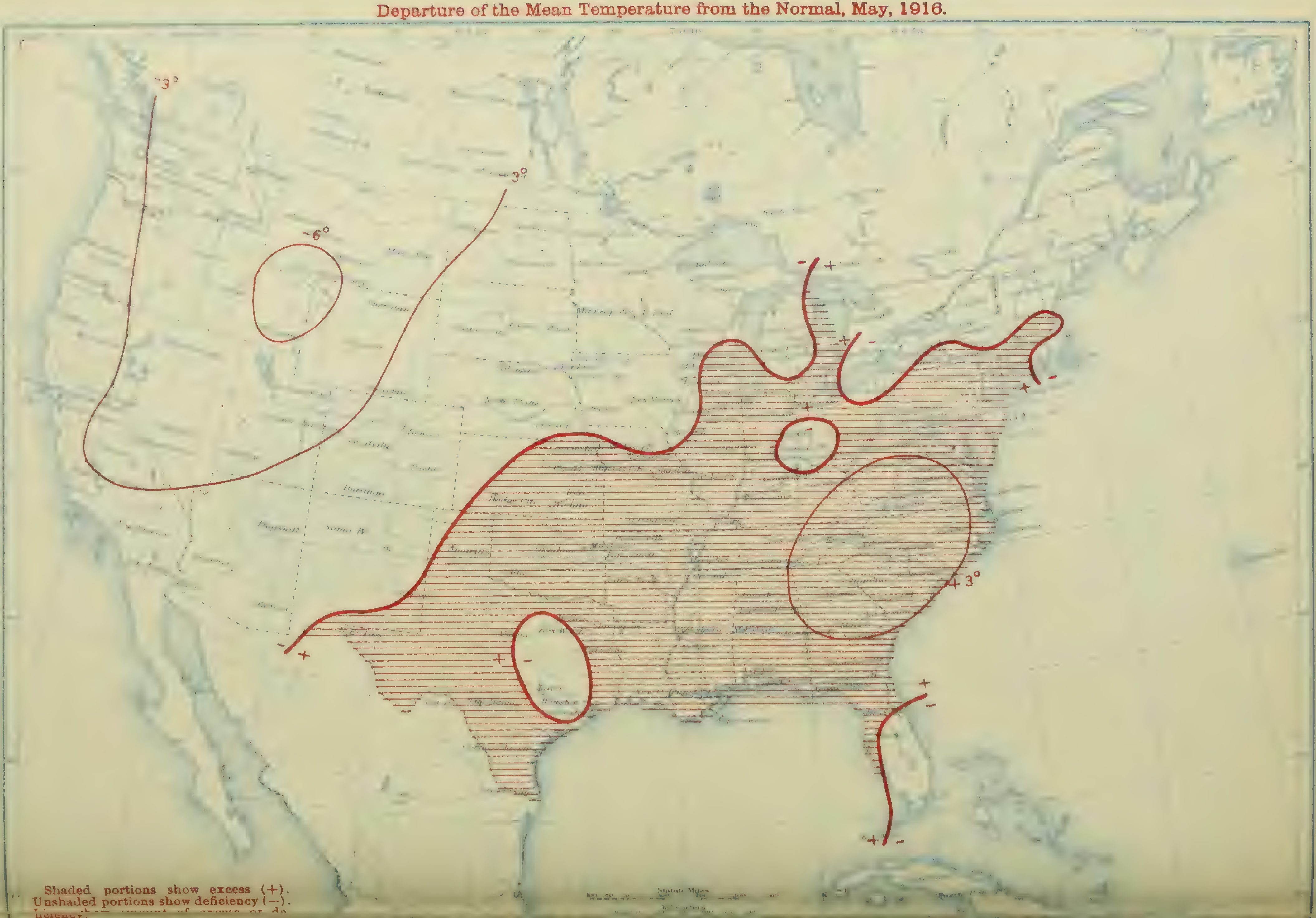
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MAY, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JUNE 21, 1916.

Departure of the Mean Temperature from the Normal, May, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).

J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XX. COLUMBIA, MO., MAY, 1916. No. 5.

GENERAL SUMMARY.

ay, 1916, was a month of moderate warmth and sunshine; ndant rainfall, except along the southern Ozark region, and h wind. It was nearly two degrees warmer and two and a ter inches less wet than May, 1915; and altogether, the ent month was much more favorable for crops than last May. hile the mean temperature for the month was nearly nor- being in fact slightly above normal, the warmth was not ly distributed. A great many of the central and northern ties experienced rather long periods of cool and wet weather had its disadvantages; and in fact the changes from cool arm and back again to cool were of marked occurrence, pt perhaps in the southeast lowlands where warmth was more ly. Physiologically speaking, it was a cool month because several days at a time the daily maximum temperatures with or but little above the mean daily normal. Tempera- s were 90 or high at all stations on only one day, while he other hand they were below 80 on an average of 15 days. reezing temperatures occurred, but light frost formed dur- ne night, at one station in the Ozark plateau.

ne precipitation was markedly excessive in the northwest au and northeast plain, and slightly so in the southwest n; and it was slightly below normal in the Ozark plateau southeast lowlands. Nine stations, mostly in the northern of the State, received total amounts of 9 inches or more, e at the same time five stations experienced falls of 3 inch- ithin 24 hours. In the southern tier of counties the total thly fall was barely enough for crops.

ne weather was very favorable for wheat, oats, meadows pastures. The first cutting of alfalfa, which was very fine, put up in good condition. Strawberries, in the principal vberry counties, Newton, McDonald, Jasper, and Lawrence probably never better.

nunderstorms were quite frequent, and the accompanying l and hail caused some local damage, especially on the 13th, , and 28th.

TEMPERATURE.

ne monthly mean temperature, 67 stations reporting, was °. The mean departure from the normal for 53 stations ng 10 or more years' record was plus 0.7°. With an ex- 2.6°, the southeast lowlands was the warmest division of State; the mean temperature and departure from normal in other other four divisions were plus 0.9, 0.7, and 0.2, he southwest plain, Ozark plateau, and the northwest au and northeast plain, respectively. The highest local thly mean was 73.0°, at Caruthersville, and the lowest was °, at Unionville. The highest temperature recorded was at Grant City on the 6th, Jackson on the 10th, and Car- rsville on the 13th. The lowest was 33°, at Unionville on 18th. Temperatures of 90° or higher occurred on an aver- of 2 days.

PRECIPITATION.

ne average precipitation for the State, 78 stations reporting, 5.61 inches. The departure from the normal for 68 sta- having 10 or more years' record was plus .89 inch. The ige precipitation and departure from the normal for each ion were as follows: northeast plain, 6.72 inches, excess 33 inches: southeast lowlands, 3.40 inches, deficiency .84 ; Ozark plateau, 4.27 inches, deficiency .47 inch; south- plain, 5.94 inches, excess .69 inch, and northwest plateau, inches, excess 2.00 inches. The greatest local monthly amount was 10.58 inches at Palmyra, and the next greatest was 10.01 inches at Louisiana; five other stations received amounts in excess of 9.00 inches. The least monthly amount was 2.00 inches, at Hollister. The greatest amount in any 24 consecutive hours was 4.10 inches, at St. Joseph on the 11-12th, and the next heaviest 24 hours fall was 3.70 inches at Unionville on the 12th.

The average number of days with 0.01 inch or more precipitation was 11, which is 2 above normal, and 1 less than May, 1915.

WIND.

The prevailing winds were from the southwest. It was the windiest May since 1909. While fresh to strong winds occurred on several dates, there were no seriously damaging storms.

SUNSHINE AND CLOUDINESS.

Sunshine for the State averaged 66 per cent of the possible. It was 11 per cent above normal at Kansas City, 11 below at Columbia, and about normal at St. Louis.

MISCELLANEOUS PHENOMENA.

Fog, dense—3d, 28th, and 30th. Hail—13th, 24th, and 28th. Halos, solar—1st, 4th, 6th, 16th, 17th, 18th, and 27th. Halos, lunar—9th, 12th. Thunderstorms—local on the 20th, 23d, 24th, and 26th, and more or less general on the 21st, 27th, 28th, 29th, and 31st.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean Relative Humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	29.88	80	......	246	55	6,336	8.5	36	w.	27
Hannibal	29.89	79	......	......	......	7,542	10.1	42	e.	12
Kansas City	29.85	73	54	309	70	9,538	12.8	44	s.	28
St. Joseph	29.85	80	56	270	61	6,924	9.3	33	nw.	7
St. Louis	29.90	71	54	302	68	10,179	13.7	54	s.	27
Springfield	29.89	78	60	288	66	8,335	11.2	34	w.	14
Cairo, Ill	29.91	75	61	......	......	6,357	8.5	34	n.	11
Keokuk, Iowa	29.89	77	63	284	63	6,279	8.4	36	sw.	10

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	62.1	−2.3	93	30	5.35	+0.58	......	0	5	....	....	....
1889	63 5	−0.9	96	28	6.56	+1.79	......	0	5	....	....	....
1890	62.8	−1.6	96	32	3.47	−1.30	......	0	6	....	....	....
1891	61.5	−2.9	97	28	4.26	−0.51	......	0	8	....	....	....
1892	60.7	−3.7	91	28	7.80	+3.03	3.90	0	17	5	9	17
1893	61.8	−2.6	94	30	5.89	+1.12	5.83	0	10	11	11	9
1894	63.7	−0.7	95	22	3.99	−0.78	4 20	0	8	13	11	7
1895	64 6	+0.2	103	28	4.08	−0.69	3.43	0	9	13	12	6
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	0	12	12	12	7
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	0	7	16	11	4
1898	65.2	+0.8	97	31	7.90	+3.13	5.50	0	14	12	10	9
1899	66.9	+2.5	96	34	6.26	+1.49	5.28	0	12	10	13	8
1900	66 3	+1.9	97	29	3.69	−1.06	4.00	0	10	14	11	6
1901	63 8	−0.6	98	30	1.47	−3.30	3.04	0	6	15	10	6
1902	69.4	+5.0	98	39	5.03	+0.26	4.35	0	11	13	11	7
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	0	15	9	10	12
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	0	12	13	10	8
1905	64.9	+0.5	94	34	4.87	+0.10	4.55	0	10	12	11	8
1906	66 3	+1.9	98	27	2.16	−2.61	3.83	0	7	15	10	6
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	0	10	14	6	11
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	0	12	12	10	9
1909	63.3	−1.1	96	23	5.34	+0 57	5 26	0	9	15	9	7
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	0	13	11	8	12
1911	68 8	+4.4	101	27	1.55	−3.22	2.06	0	5	19	7	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	0	7	18	8	5
1913	65.8	+1.3	101	33	3.05	−1.93	2.95	0	8	16	7	8
1914	66.6	+2.0	98	31	1.47	−3 40	3.00	0	5	17	9	5
1915	63.7	−1.4	97	30	7.86	+3.04	7.15	0	12	12	7	12
1916	65.6	+0.7	96	33	5.61	+0.89	4.10	0	11	15	8	8

Climatological data for May, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Northeast Plain																				
Boonville	Cooper	600	39	...	...	...	...	...	...	...	6.91	+1.44	1.19	0	14	20	2	9	se.	C. Randecker.
Brunswick	Chariton	652	36	63 7	−0.4	89	24	41	18	36	7.53	+2.56	1.69	0	13	11	2	18	se.	Louis Benecke.
Columbia	Boone	784	26	64.9	+0.4	89	24	44	4	35	5.21	+0.35	1.60	0	16	11	5	15	s.	U. S. Weather Burea
Fayette	Howard	725	31	64.9	+0.7	89	24	41	4	31	5.98	+1.29	1.63	0	10	...	...	...	...	Prof. T. B. Smith.
Fulton	Callaway	818	24	65.4	+0.5	89	7†	40	4	38	7.18	+2.47	3 28	0	11	11	11	9	nw.	Dr. C. W. Knapp.
Gorin	Scotland	700	27	...	...	...	...	...	...	...	9.54	+5.08	1.85	0	12	6	7	18	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	63.9	−0.5	89	24	43	1	35	6.25	+1.25	2.02	0	17	10	9	12	sw.	U. S. Weather Burea
Hermann	Gasconade	482	42	...	...	...	...	...	...	...	6.28	+1 97	1.18	0	15	12	6	13	s.	C. T. Maushund.
Jefferson City	Cole	628	30	65.2	0.0	89	24	44	1†	35	8.33	+3.94	2.60	0	13	21	5	5	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	...	...	...	...	...	...	...	5.16	...	1.90	0	8	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	500	38	62.5	−1.4	88	24†	38	2†	39	10.01	+5.54	3.30	0	16	15	12	4	w.	J. T. Farrell.
Macon	Macon	881	18	62.6	−1.5	87	7†	38	2†	37	9.52	+5.64	1.72	0	15	12	7	12	sw.	John A. Cook.
Mexico	Audrain	797	38	64.8	+0.3	91	24	40	18	33	6.48	+1.69	1.09	0	13	16	0	15	w.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	66.8	+0.8	91	25†	41	16	33	4.46	−0.94	1.22	0	12	7	16	8	sw.	E. E. Steines.
Palmyra	Marion	652	4	62.4	...	89	24	38	2†	39	10.58	+5.93	2 48	0	17	12	9	10	sw.	W. B. Markell.
St. Catherine	Linn	914	3	62.4	...	85	24	39	4	32	4.55	...	1.83	0	13	13	13	5	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	66.9	+5.5	91	26	44	21	36	4.02	−0.31	0.80	0	9	16	7	8	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	68.0	+1.5	91	25	45	3	30	3.06	−1.24	1.00	0	12	15	9	7	sw.	U. S. Weather Burea
St. Louis (2)	......do	578	4	67.7	...	91	25†	45	3	30	3.02	...	0.91	0	12	13	10	8	se.	St. Louis University
Steffenville	Lewis	576	23	64.4	0 0	90	25	38	18	36	8.46	+3.18	3.65	0	12	11	14	6	sw.	Frank Hall.
Unionville	Putnam	1,072	23	60.4	−2.4	85	24	33	18	36	9.23	+3.38	3.70	0	17	17	1	13	s.	Geo. W. Davis.
Vandalia	Audrain	796	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	C. B. Ellis.
Warrenton	Warren	865	25	64.8	−0.2	91	24†	42	2	36	6.04	+1.13	1.31	0	14	9	11	11	sw.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	...	...	...	...	...	...	...	2.49	−1.21	0.85	0	9	16	6	9	w.	D. L. Albert.
Cardwell	Dunklin	225	5	72.5	...	95	13†	45	4	35	4.63	...	1.91	0	8	17	10	4	sw.	F. E. Tate.
Caruthersville	Pemiscott	220	25	73.0	+4.0	96	13	46	1	33	5.89	+1.77	1.53	0	8	24	2	5	se.	H. E. Averill.
Doniphan	Ripley	440	11	69.4	+2.7	91	10†	40	17	40	2.56	−1.21	1.20	0	7	14	11	6	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	69.2	+3.8	96	10	39	17	37	2.65	−1.63	0.75	0	8	8	14	9	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	67.0	+1.1	91	26	43	19	40	2.64	−1.74	0.93	0	8	15	13	3	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	...	...	...	...	...	...	...	5.39	+1.07	1.40	0	12	16	1	14	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	...	...	...	...	...	...	...	2.16	...	0.75	0	8	16	0	15	s.	George F. Ellis.
Poplar Bluff	Butler	333	12	68.4	−0.2	91	14†	40	17	35	2.53	−2.46	0.82	0	8	19	2	10	...	Albert E. Cox.
Sikeston	Scott	328	15	71.4	+4.1	93	10†	46	17	34	3.39	−1.37	1.08	0	8	20	7	4	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	70.3	+2.8	90	26	49	3	29	3.06	−0.77	0.95	0	9	11	11	9	s.	U. S. Weather Burea
Ozark Plateau																				
Arlington	Phelps	695	14	...	...	...	...	...	...	...	5.05	+0.73	1.25	0	11	17	4	10	s.	G. V. Randolph.
Bagnell	Miller	594	...	...	...	...	...	...	...	...	5.48	+0.91	1.39	0	12	13	9	9	w.	Mrs. Nellie V. House
Birchtree	Shannon	1,200	22	61.2[a]	−4.1	87	5†	40	4†	36	2.55	−1.59	1.00	0	8	22	2	7	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	67.2	+1.5	91	24	41	4	36	6.05	+0.64	1.10	0	9	18	6	7	sw.	A. C. Fink.
Cassville	Barry	1,500	5	63.4	...	87	23	35	4	39	2.35	...	0.78	0	7	20	7	4	sw.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	65.0	...	87	7†	41	1	35	6.18	...	1.27	0	9	19[c]	3[c]	6[c]	s.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	66.4[a]	+0.3	89	24	37	16	39	4.66	−1.36	1.73	0	9	20[a]	3[a]	7[a]	sw.	H. E. Dean.
Eldon ††	Miller	934	15	64.4	...	90	24	40	3	35	5.60	+0.92	1.88	0	12	16	12	3	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	68.7	...	89	6	45	2†	30	2.56	...	0.86	0	9	21	7	3	s.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	66.9	+1.0	93	10	42	4†	42	3.64	−0.37	0.87	0	11	18	4	9	s.	A. C. Leach.
Goodland	Iron	1,000	11	63.6	+0.1	91	10	35	17†	44	4.45	+0.99	0.90	0	8	20	3	8	s.	F. M. Adams.
Hollister	Taney	1,000	7	69.5	...	92	24	40	4	34	2.00	−3.12	1.00	0	4	25	0	6	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	66.8	+2.0	90	10	40	4	35	3.00	−1.45	1.10	0	7	22	2	7	s.	R. F. Harmon.
Ironton	Iron	925	38	66 6	+2.0	92	10	35	17	41	2.64	−2.29	0.75	0	8	7	16	8	sw.	W. H. Delano.
Koshkonong	Oregon	911	15	68.4	+1.3	91	10	43	4	42	3.42	−1.01	1.46	0	7	15	12	4	se.	R. M. Hitt.
Lebanon	Laclede	1,265	27	66.3	+0.2	93	24	42	1†	39	6.28	+0.20	1.60	0	11	19	1	11	s.	Earl J. Breech.
Lockwood	Dade	1,088	21	66.8	+2.3	90	24	44	4†	32	6.60	+2.09	1.33	0	9	13	9	9	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	65.6[a]	+1.2	88	10	41	4	36	3.05	−1.04	1.05	0	9	12	8	11	s.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	J. R. White & Son.
Neosho	Newton	1,083	33	67.2	+0.9	89	24	39	16	37	5.28	−0.89	1.33	0	11	21	2	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	65.1	+0.5	90	24	41	16	43	6.06	+0.96	1.47	0	10	18	6	7	w.	Prof. Elmo G. Harris
Springfield	Greene	1,350	28	65.8	+1.2	87	24	42	3	30	2.78	−2.77	0.65	0	11	16	13	2	s.	U. S. Weather Burea
Wheatland	Hickory	920	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Mrs. S. A. Jackson.
Southwest Plain																				
Amoret	Bates	850	7	65 8	...	94	24	37	3	36	3.25	...	0.83	0	11	14	6	11	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	E. F. Hirni.
Clinton	Henry	800	29	67.0	+1.3	94	24	42	3†	35	5.87	+0.21	1.80	0	9	10	18	3	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	65.0	+1.2	92	24	41	4	39	7.06	+2.36	1.62	0	11	13	4	14	sw.	A. J. Sharp.
Lamar	Barton	964	35	67.8	+2.1	91	24	41	16	36	5.53	−0.17	1.82	0	10	22	3	6	se.	Dick B. Houston.
Lamonte	Pettis	863	27	63.8	...	92	24	41	11	36	6.33	+0.88	2.50	0	9	13	11	7	sw.	J. Ed. Hall.
Marshall	Saline	779	25	64.1[c]	−0.1	90	24	39	4	35	5.52	+0.52	1.70	0	9	10[c]	13[c]	5[c]	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	67.0	...	91	24	41	3	33.	3.43	−2.25	0.87	0	10	17	9	5	sw.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	...	...	...	...	...	...	...	6.78	+0.86	1.80	0	10	17	3	11	sw.	W. E. Mathews.
Warrensburg	Johnson	883	37	66.7	+1.3	95	24	41	3	47	6.45	+1.55	2.80	0	13	10	14	7	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	65.7	−0.2	94	25	38	4	41	7.14	+2.23	1.65	0	10	10	17	4	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	...	...	...	...	...	...	...	7.96	...	1.66	0	12	11	10	10	sw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	65.1	+0.8	88	24	42	4†	33	6.42	+1.45	3.00	0	6	19	8	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	62.6	+0.2	89	26	35	2†	37	7.01	+1.88	2 32	T.	13	8	14	9	sw.	M. H. Moulton.
Chillicothe	Livingston	...	1	...	...	...	...	...	...	...	6.96	+0.12	1.95	0	12	13	0	18	...	Hocey O. Dupy.
Conception	Nodaway	982	31	62.4	+1 3	88	6	37	2	32	7.15	+2.62	1.93	0	14	5	19	7	se.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	62.8	+0 6	96	6	37	19	44	7.04	+2.06	2.46	0	10	19	3	9	s.	W. H. Campbell.
Kansas City	Jackson	963	27	65.4	+0.9	91	24	42	3	33	5 36	+0.25	2.67	0	14	13	12	6	s.	U. S. Weather Burea
Kidder	Caldwell	1 017	25	60.9	−2.1	87	24†	38	1†	31	7.90	+2.02	2 24	0	17	14	7	10	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	65.4	+1.4	90	24†	39	3	34	6.29	+1.24	1.98	0	12	18	1	12	s.	J. W. Keithley.
Liberty	Clay	864	27	65.4[b]	+1.4	94	24	39	3	39	6.54	+1.08	1.90	0	11	15	12	4	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	61.3	−1.1	92	6	35	18	44	9.88	+4.58	2.50	0	16	13	3	15	w.	J. R. Brink.
Oregon	Holt	1,113	60	61.2	−2.1	86	6	38	1	31	7.23	+2.37	2.15	0	12	12	9	10	w.	Tom Curry.
St. Joseph	Buchanan	967	44	64.2	...	91	24	40	3	32	7.79	+3.42	4.10	0	13	9	16	6	se.	U. S. Weather Burea
Tarkio	Atchison	1,150	4	62.8	...	90	6	36	18	39	9.76	...	2.66	0	16	19	5	7	sw.	John F. Frazier.
Trenton	Grundy	812	21	63.8	−0.2	89	26	37	3	35	7.98	+2.91	2.04	0	8	15[a]	5[a]	10[a]	se.	W. H. Estes.
State means and extremes		...	...	65.6	+0.7	96	6†	33	18	47	5.61	+0.89	4.10	0	11	15	8	8	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete report used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D No. 1.

Daily precipitation for May, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ortheast Plain.																																	
ville ‖	Missouri	1.07	....	.30	....	....	....	....	.45	....	....	....	.35	.93	.06	.06	....	....	....	....	.10	.20	.40	....	....	....	....	.78	1.19	1.00	.02	....	6 91
swick ‖	Grand	1.53	....	.17	....	....	....	....	.50	....	....	....	.74	1.69	.06	.07	....	....	....	....	.07	.62	T.	....	....	....	....	.31	1.22	.51	.04	....	7.53
mbia***	Missouri	.38	.26	.02	....	....	....	T.	.21	.01	....	.03	1.10	T.	.11	....	....	....	....	.07	.01	.26	....	....	....	....	.16	1.49	.31	.78	....	.01	5.21
tte	do	.67	.15	....	....	....	....	.16	....	....	....	....	1.50	....	.19	....	....	....	....	.05	....	.79	....	....	....	....	....	1.63	.21	.63	....	....	5.98
n	do	1.11	.07	.16	....	....	....	....	.06	T.	....	T.	1.12	....	....	.15	....	....	....	.25	....	.26	....	....	....	....	.75	2.53	**	.72	....	T.	7.18
n	Mississippi	....	.16	....	....	....	....	.09	.08	....	....	....	1.67	1.81	1.59	....	....	....	....	.11	....	.90	....	07	1.14	....	....	1.85	....	.07	....	....	9.54
nibal***	do	.55	.28	.01	....	....	.01	.30	.09	....	T.	.30	1.41	14	.15	....	....	.02	....	.01	....	.26	....	....	.04	....	.19	1.83	T.	.66	....	T.	6.25
naun ‖	Missouri	.43	.04	.28	....	....	....	....	.19	....	T.	....	.18	.42	.04	.60	....	....	....	....	.02	1.15	.05	....	....	....	....	.76	1 18	.76	.18	....	6.28
rson City ‖	do	.70	.04	.35	....	....	....	....	.22	....	....	....	.44	.62	.05	.18	....	....	....	....	....	.15	....	....	....	....	....	1.11	2.60	1.85	.02	....	8 33
esville	Chariton	....	.15	....	....	....	....	.14	....	....	....	....	1.90	.55	.17	....	....	....	....	.04	....	.71	....	....	....	....	....	1.50	....	....	....	....	5.16
siana	Mississippi	.81	.09	.20	....	....	....	....	1.52	....	T.	....	1.06	.44	.04	.06	....	.05	....	T.	.05	.68	.01	....	T.	....	1.10	3.30	.12	48	T.	....	10.01
on	Chariton	1.72	....	.15	....	....	....	T.	.14	....	....	....	.88	1.56	.55	.23	....	.01	....	....	.14	.62	.38	....	.16	....	....	.86	.88	1.24	T.	T.	9.52
eo ‖	Mississippi	.92	.05	.40	....	....	....	....	.38	....	....	....	.44	1.09	.28	.10	....	....	....	....	.08	T.	T.	....	....	....	....	.83	.91	.75	.25	....	6.48
eid	Meramec	.12	.04	.38	....	....	....	....	.08	....	....	.10	.05	.08	...	.73	....	....	....	T.	....	.46	....	....	....	....	....	1.22	.85	.35	....	T.	4.46
yra ‖	Mississippi	.64	.02	.20	....	....	....	.34	.25	....	....	....	.74	1.49	2.48	.16	....	.03	....	....	05	.21	1.12	....	....	....	....	1.54	.79	.50	.02	....	10.58
atherine	Grand	.08	.07	.05	....	....	....	....	.16	....	T.	....	1.83	.86	.18	....	....	T.	....	.08	....	.45	....	.04	.13	....	....	.44	....	.18	....	....	4.55
arles	Missouri	.23	.34	....	....	....	....	.01	....	....	....	....	.30	T.	....	.75	....	....	....	....	....	.38	....	....	....	....	....	64	.80	.57	....	....	4.02
ouis (1)***	Mississippi	.02	.25	.07	....	....	....	....	.01	....	T.	.06	.05	.17	.36	....	....	....	....	T.	....	.40	....	....	....	....	....	.97	.54	.10	....	T.	3.00
uis (2)	do	.01	.23	.08	....	....	....	....	.01	....	....	.07	.06	.18	.27	....	....	T.	....	T.	....	.45	....	....	....	....	....	.91	.60	.15	....	T.	3.02
eville	do	.82	.10	....	....	....	....	.70	....	....	....	....	.02	1.08	.08	....	....	....	....	.05	....	.40	.08	T.	1.20	....	....	3.65	....	.28	....	....	8.46
nville ‖	Grand	1.80	....	.16	....	....	....	.12	.10	....	....	....	1.10	2.60	.30	.40	....	....	....	T.	.20	.30	.06	.20	1.20	....	....	.22	.15	.12	.20	....	9.23
alia	Mississippi	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
enton ‖	do	.42	.03	.33	....	....	....	....	.08	....	....	....	.23	.50	....	.37	....	....	....	....	.05	87	.08	....	....	....	....	.51	1.31	1.09	.17	....	6.04
theast Lowlands.																																	
Girardeau	Mississippi	....	.30	.10	....	....	....	....	....	....	....	....	.15	....	....	.85	.02	....	.02	....	....	.70	....	.05	....	....	....	....	....	....	.30	....	2 49
well	do	.21	.55	.35	....	....	....	....	....	....	....	....	....	....	....	1.91	....	....	.02	....	....	1.25	.04	....	....	....	....	....	....	T.	.30	....	4.63
thersville	do	.18	.74	1.53	....	....	....	....	....	....	....	....	....	....	....	1.12	.35	....	T.	....	....	1 40	.04	....	....	....	....	....	....	T.	.53	T.	5.89
phan	Black	.20	.16	.10	....	....	....	....	....	....	....	....	....	....	....	.60	....	....	T.	....	....	1.20	....	....	....	....	....	.20	....	T.	.10	T.	2.56
son	Mississippi	.18	.44	....	....	....	....	....	....	....	....	.07	....	....	.75	....	....	.04	....	....	....	.75	....	....	....	....	....	02	....	.40	....	....	2.65
le Hill	do	.35	.36	....	....	....	....	....	....	....	....	.10	....	....	....	.30	....	....	....	....	....	.93	....	....	....	....	....	....	.20	.25	.15	....	2.64
Madri ‡	do	....	.47	1.20	.05	....	....	....	....	....	....	.01	....	....	....	1.40	.10	....	.01	.01	....	.80	.13	....	....	....	....	....	.01	....	1.20	....	5.39
n (near)	do	.20	.15	.10	.05	....	....	....	....	....	....	....	....	.42	....	....	....	....	....	....	.75	....	....	....	....	....	....	....	.05	....	.44	....	2.16
ar Bluff	Black	....	.75	.24	....	....	....	....	....	....	....	....	....	....	....	.54	.02	....	.02	T.	....	.82	....	....	....	....	....	....	.03	....	.11	....	2.53
ston	Mississippi	.12	.18	.21	....	....	....	....	....	....	....	T.	....	....	....	1 08	.27	....	....	....	....	.73	....	....	....	....	....	....	01	....	.79	....	3.39
o, Ill.***	do	.06	.13	.26	....	....	....	....	....	....	....	.03	....	....	....	.91	08	T.	.01	....	..	.91	T.	....	....	....	....	....	T.	.66	....	T.	3.06
rk Plateau.																																	
gton ‖	Gasconade	.18	.37	.65	....	....	....	....	....	....	.18	....	.32	....	....	.57	....	....	....	....	....	.35	....	....	....	....	....	.28	.65	1.25	.25	....	5.05
ell	Osage	.75	.12	.35	T.	....	....	....	.13	....	.28	....	T.	.22	....	.13	....	....	....	....	....	.24	T.	....	....	....	....	1.39	.86	.88	.13	....	5.48
ntree	Black	.14	.11	.28	....	....	....	....	....	....	....	....	....	....	....	.68	....	....	....	....	....	1.00	....	....	....	....	....	.08	.16	...	.10	....	2.55
ar	Osage	1.07	....	.90	....	....	....	....	....	....	....	.68	....	....	.14	....	....	.18	....	....	....	.25	....	....	....	....	....	1.08	1.10	.65	....	....	6.05
ille	White	.78	.43	....	....	....	....	....	....	....	....	....	.21	.19	....	....	....	....	....	.29	....	....	....	....	....	.30	....	....	T.	.15	....	....	2.35
ker	Gasconade	.47	.71	....	....	....	....	....	T.	....	....	.56	....	....	.43	....	....	....	....	....	.36	....	....	....	....	....	1.27	.96	1.03	.39	....	....	6.18
	Neosho	1.73	1.16	.05	....	....	....	....	....	....	....	.01	....	....	.43	T.	....	....	T.	....	....	.81	....	....	....	....	....	.25	....	.20	....	.02	4.66
n	Osage	.66	.37	....	....	....	.10	....	.13	.10	.04	....	.56	....	.20	....	....	....	....	....	....	.32	....	....	....	....	....	1.88	.82	.42	....	....	5.60
City	Black	.10	.17	.25	....	....	....	....	....	....	....	.41	....	....	....	.40	....	....	.11	....	....	.86	....	....	....	....	....	10	....	....	.16	....	2.56
	Meramec	.20	.18	.21	....	....	....	....	....	....	....	.41	.03	.16	.65	.22	....	....	....	....	....	.74	....	....	....	....	....	.66	.18	T.	....	....	3.64
lland	Black	.40	....	.43	....	....	....	....	....	....	....	.34	.23	....	....	.90	....	....	....	....	....	.75	....	....	....	....	....	.75	.65	....	....	....	4.45
ister	White	....	....	.40	....	....	....	....	....	....	....	....	....	....	.40	.20	....	....	....	....	....	1.00	....	....	....	....	....	....	....	....	....	....	2.00
ston	Gasconade	T.	.30	.25	....	....	....	....	....	....	....	.47	....	T.	T.	.17	....	T.	....	....	....	.60	....	....	....	....	....	1.10	.11	T.	....	....	3.00
ton	Mississippi	T.	.12	.35	T.	....	....	....	....	....	....	T.	.42	....	T.	.50	....	....	.05	....	....	.75	....	....	....	....	....	....	.35	.10	T.	....	2.64
konong	Black	....	.14	.23	....	....	....	....	....	....	....	....	....	....	....	.97	....	....	....	....	....	1.46	....	....	....	....	....	.55	.03	T.	.04	....	3.42
non ‖	Osage	.65	.20	.60	....	....	....	....	....	....	....	....	.60	....	....	.40	....	....	.20	....	....	.40	....	....	....	....	....	.45	1.60	.48	.70	....	6.28
wood	do	1.33	.27	....	....	....	....	....	....	....	....	.72	....	....	.17	....	....	....	.31	....	....	.62	....	....	....	....	....	1.23	.70	.75	....	....	6.60
ntain Grove ‖	White	.14	.07	.24	....	....	....	....	....	....	....	T.	.20	....	....	.38	....	....	....	....	....	1.05	....	....	....	....	....	....	.78	.07	.12	....	3.05
nt Vernon	Neosho	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
ho	do	1.33	.85	.10	....	....	....	....	....	....	....	.52	....	....	.44	.17	....	T.	....	....	....	.94	....	....	....	....	....	.64	.07	.20	.02	T.	5.28
a	Meramec	.15	.14	.41	T.	....	....	....	....	....	....	....	.36	....	....	.41	....	....	....	....	....	.76	....	....	....	....	....	.82	1.47	1.21	.33	....	6 06
ngfield ***	White	.23	.56	T.	....	....	....	....	....	....	....	.32	T.	....	.23	.01	....	.01	....	....	.49	.11	....	....	....	....	....	.61	.05	.16	....	T.	2.78
atland	Osage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
thwest Plain.																																	
ret	Osage	.05	.20	T.	....	....	....	....	....	....	....	T.	.49	T.	.25	....	....	.01	....	....	.0	.30	....	....	....	....	....	.83	.22	.80	....	.03	3.25
eton City	do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
on	do	.73	.30	....	....	....	....	....	....	....	....	.16	1.00	....	.25	....	....	....	....	....	....	.30	....	....	....	....	1.10	1.80	.23	....	....	....	5.87
isonville ‡	do	1.22	....	.13	....	....	....	....	....	....	....	....	.34	.56	....	.35	....	....	....	....	....	.36	....	.03	.25	....	....	72	1 48	1.62	....	T.	7.06
ar	Neosho	.92	.11	.48	....	....	....	....	....	....	....	....	.30	....	....	.12	....	....	.10	....	....	.49	....	....	....	....	....	.09	1.82	1.10	T.	....	5.53
onte	Missouri	.35	.25	.08	....	....	....	.20	....	....	....	....	1.05	....	.70	....	....	....	....	....	T.	T.	....	T.	....	....	T.	2.50	.20	1.00	....	T.	6.33
hall	do	....	.25	T.	....	....	....	....	.35	....	T.	T.	1 36	.42	....	....	....	....	....	.25	....	.44	T.	T.	....	....	T.	1.70	05	.70	....	....	5.52
da	Osage	.50	.45	....	....	....	....	....	....	....	....	.08	....	....	....	.15	....	....	.18	....	....	.49	....	....	....	....	....	.87	.11	.55	....	.05	3.43
ola	do	1.20	.04	.36	....	....	....	....	....	....	....	....	....	.12	....	.23	....	....	....	....	....	.20	.06	....	....	....	....	1.80	1.45	1.32	....	....	6.78
ensburg	Missouri	.33	.25	.03	....	....	....	....	.14	....	....	.09	1.00	.03	.22	....	....	....	....	....	....	.40	.01	....	....	....	....	2.80	.13	1.02	....	T.	6.45
saw	Osage	1.33	T.	.45	....	....	....	....	....	....	....	....	.17	.65	....	.18	....	....	....	....	....	.13	....	....	....	....	....	1.35	1.65	1.15	.08	....	7.14
erly	Missouri	1.66	....	.14	....	....	....	....	.24	....	....	....	.54	1.42	....	.18	....	....	....	....	.17	.36	.08	....	....	....	....	1.12	1.37	.68	....	....	7 96
rthwest Plateau.																																	
on	Grand	....	....	....	....	....	....	....	....	1.40	....	....	2.15	.85	....	....	....	....	....	.22	....	....	....	....	....	....	....	1.40	....	....	....	.40	6.42
any	do	.20	T.	....	....	....	....	T.	.15	....	.01	....	2.32	1.11	.54	.02	...	T.	....	.17	....	.50	....	.78	.90	....	....	.25	....	T.	....	.06	7.01
icothe	do	1.76	....	.06	....	....	....	....	.17	....	....	....	.85	1.95	....	.47	....	....	....	....	36	.48	....	.06	....	....	....	.10	.50	.20	....	....	6.96
eption	Missouri	.04	.26	....	....	....	T.	....	....	....	T.	....	1.93	1.20	.40	T.	....	.03	....	.27	.08	.65	....	.97	.91	....	....	.12	....	.21	....	.08	7.15
t City	Grand	.22	.12	....	....	....	....	....	T.	....	....	....	1.24	2 46	....	....	....	....	....	.09	T.	1.04	....	.60	75	....	....	T.	...	.37	....	.15	7.04
sas City***	Missouri	....	.12	....	....	....	....	.03	....	.01	....	.01	.87	.01	.55	....	....	....	....	....	.25	....	....	.02	....	....	.99	1.68	.30	.46	....	.06	5.36
er	Grand	1.28	....	.07	....	....	....	....	.13	....	....	....	1.12	2 24	.15	.65	....	....	....	.05	.68	.25	.01	.25	.16	....	....	.21	.50	.11	.04	....	7.90
ngton	Missouri	1 98	....	.16	....	....	....	....	.10	....	....	....	.40	1.12	....	.39	....	....	....	....	.07	.37	....	.02	....	....	....	.18	1.00	.50	....	....	6.29
rty	do	....	.03	.07	....	....	....	....	....	.25	....	T.	1.45	.45	.83	....	....	....	....	T	....	.40	....	.06	....	....	....	1.90	70	.40	....	....	6.54
ville	do	.50	....	.15	....	....	....	....	.10	....	T.	....	1.10	1.45	1.77	.11	....	.03	....	.05	.38	.60	....	.83	2.50	....	....	.02	05	.24	....	....	9 88
on	do	.03	.16	....	....	....	....	.05	....	....	....	....	2.15	.88	.64	....	T.	....	....	.43	.75	....	....	1.57	....	....	....	.20	....	.26	....	.11	7.23
oseph***	Missouri	....	.17	....	....	....	T.	.14	....	....	T.	31	3 82	.02	.64	....	....	....	....	.22	.73	.23	T.	.79	.27	....	....	.39	T.	T.	....	.06	7.79
io	do	.02	.02	....	....	....	....	.06	.27	....	....	....	.92	2.66	.47	.01	....	.01	....	.41	.08	.80	....	.14	2.31	....	....	....	....	1.48	....	.10	9.76
ton	Grand	....	.06	.07	....	T.	T.	.29	....	....	.02	1.40	2.04	.24	.36	....	....	....	....	.09	.51	.18	.38	.47	....	....	.04	.20	.04	.02	....	1.57	7.98
		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0 01 inch.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

** Precipitation in the next following measurement.

‡ Separate dates of fall not recorded.

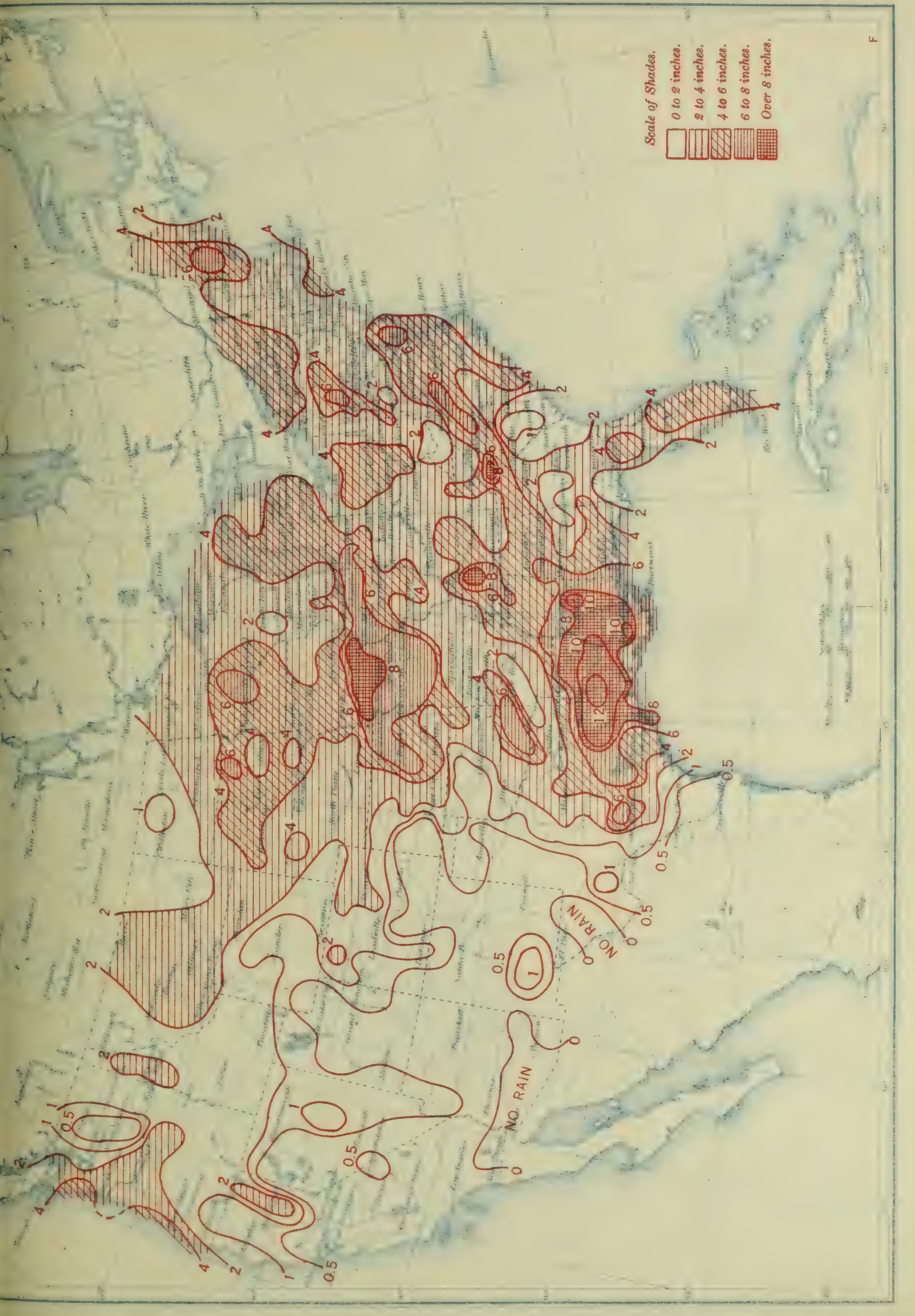
Daily temperatures for May, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	61	54	59	75	83	83	86	75	83	76	70	54	78	71	64	64	66	63	61	77	78	78	81	89	88	86	73	80	80	82	73
	Minimum	44	42	44	42	47	55	64	57	51	55	48	49	49	52	47	46	46	41	43	53	57	58	58	62	73	79	67	58	62	58	62
Columbia	Maximum	59	52	56	75	83	84	89	75	84	80	67	53	87	82	66	63	65	64	70	77	76	77	81	89	89	83	74	79	77	80	71
	Minimum	45	44	45	44	52	65	63	58	55	54	46	50	52	61	50	47	46	44	47	55	64	61	55	67	69	70	63	63	62	58	62
Fayette	Maximum	58	53	57	76	83	82	87	76	83	78	70	51	85	79	64	64	65	64	67	79	76	74	80	89	88	83	72	82	79	87	[illegible]
	Minimum	43	43	44	41	55	60	63	57	52	55	49	49	57	60	48	47	47	43	48	52	62	60	59	67	67	68	57	58	61	60	75
Hannibal	Maximum	57	54	57	73	82	84	88	75	81	79	68	54	74	83	66	60	66	61	63	76	73	77	81	89	89	85	71	81	79	79	72
	Minimum	43	45	44	43	55	63	65	51	46	58	46	48	50	63	51	47	46	44	44	54	61	59	57	63	70	70	60	59	63	56	58
Jefferson City §§	Maximum	58	52	60	75	86	85	87	77	83	84	67	57	86	82	70	66	70	61	76	80	75	82	84	85	87	88	76	83	80	81	73
	Minimum	44	45	44	44	50	59	60	60	55	59	48	50	51	56	49	44	45	45	45	51	59	61	55	63	68	68	64	62	61	59	[illegible]
Macon §§	Maximum	61	54	58	74	82	83	87	75	80	76	70	53	72	79	63	61	65	61	60	78	74	75	80	86	87	84	73	82	78	81	71
	Minimum	42	38	43	42	45	57	62	55	50	56	48	48	48	50	49	45	45	38	43	49	52	61	60	61	62	69	64	57	62	58	58
Mexico §§	Maximum	58	54	60	75	85	85	90	71	83	82	71	52	81	84	69	75	70	64	72	80	76	79	82	91	90	86	74	82	80	82	72
	Minimum	43	43	44	42	53	57	61	60	49	69	45	48	49	64	49	45	46	40	43	52	57	61	54	64	62	67	66	60	62	[illegible]	58
Oakfield	Maximum	69	55	57	73	84	88	90	77	83	89	70	63	84	88	78	61	71	66	76	80	74	82	82	90	91	91	83	83	81	80	71
	Minimum	46	46	44	47	57	62	64	60	53	70	49	51	51	69	54	41	46	46	46	53	60	61	60	65	68	67	64	64	61	56	58
St. Catharine	Maximum	58	53	57	71	79	80	83	79	78	76	64	59	68	68	62	61	65	60	57	75	74	75	74	85	84	84	79	80	79	80	74
	Minimum	42	40	42	39	49	58	61	56	52	60	48	47	48	59	45	44	45	55	48	51	61	55	60	61	65	67	60	55	62	56	[illegible]
St. Louis (1)	Maximum	67	57	58	73	82	87	89	77	81	88	70	64	83	85	72	66	69	63	74	78	75	82	84	88	91	90	81	82	80	80	75
	Minimum	48	48	45	51	60	63	67	66	58	62	54	53	53	64	58	51	50	48	50	57	62	65	66	67	70	73	67	64	64	60	59
Unionville §§	Maximum	57	56	57	72	80	84	83	74	80	74	66	50	66	71	60	60	62	61	60	73	75	74	76	85	86	82	75	82	78	82	72
	Minimum	40	36	40	42	44	60	62	46	48	56	47	45	44	50	42	41	39	33	37	46	52	54	55	60	62	66	60	56	60	54	[illegible]
Warrenton §§	Maximum	53	54	58	76	86	86	90	78	83	84	69	56	85	78	70	64	69	67	69	80	73	82	83	91	91	82	75	83	80	79	71
	Minimum	45	42	44	43	51	60	63	60	53	60	50	50	50	54	52	45	45	44	43	44	60	60	57	63	66	66	65	64	61	56	55
Southeast Lowlands.																																
Cardwell	Maximum	76	65	60	73	87	87	87	91	88	91	85	89	95	91	82	74	81	77	80	85	79	84	92	92	93	94	94	95	91	88	87
	Minimum	59	50	53	45	55	61	60	61	64	65	64	54	66	70	63	54	47	56	48	53	60	65	62	64	63	66	68	72	71	65	60
Caruthersville	Maximum	76	66	62	76	88	87	87	92	88	92	82	89	96	92	85	74	80	74	80	85	78	81	89	93	93	95	92	95	92	87	83
	Minimum	46	52	55	52	55	61	62	62	62	65	64	57	67	75	67	57	48	52	52	57	62	62	62	65	67	65	70	72	72	66	65
Doniphan	Maximum	74	54	57	74	88	88	87	89	85	91	83	85	91	88	82	72	80	73	78	82	76	84	88	89	90	91	90	89	89	83	80
	Minimum	53	47	50	41	49	58	57	59	54	65	59	52	60	68	62	51	40	51	42	48	58	62	58	63	59	67	67	61	70	60	56
Jackson	Maximum	78	53	59	72	85	89	88	84	84	96	85	80	91	92	85	76	73	74	79	83	79	83	89	91	92	92	89	92	92	81	80
	Minimum	50	46	47	48	50	55	56	64	48	65	55	50	54	66	63	50	39	52	43	50	60	60	52	61	60	62	69	65	65	63	58
Marble Hill	Maximum	72	60	62	77	83	86	87	88	78	85	75	80	86	89	80	73	76	74	75	76	79	80	85	90	90	91	85	87	78	83	87
	Minimum	49	46	47	48	53	54	57	48	45	49	55	55	55	70	60	50	45	52	43	44	46	47	47	50	60	65	70	65	65	62	57
Poplar Bluff §§	Maximum	80	70	53	62	73	89	87	87	90	85	90	67	87	91	88	81	74	79	69	78	81	77	83	89	90	90	91	89	90	89	84
	Minimum	55	47	42	42	43	56	57	59	55	57	61	51	56	58	63	50	40	46	43	46	54	61	59	61	60	63	69	65	69	60	60
Ozark Plateau.																																
Birchtree	Maximum	72	52	54	74	87	87	86	86	81	82	76	83	....	83	77	67	76	67	76	76	72	84	84	85	85	87	81	84	85	81	79
	Minimum	48	45	47	40	57	57	58	59	54	71	52	48	....	67	54	46	40	52	42	53	56	60	58	63	62	66	63	61	68	59	59
Cassville	Maximum	68	57	70	74	83	81	85	82	83	84	83	75	68	68	76	71	73	74	77	80	80	78	87	74	60	74	80	78	81	80	78
	Minimum	49	41	38	35	50	51	57	58	59	61	56	63	48	48	39	46	41	44	41	55	54	51	53	50	48	51	51	53	62	63	51
Eldon	Maximum	59	52	75	85	78	85	89	80	84	83	65	64	76	81	68	66	69	68	73	79	76	81	84	90	87	82	76	82	80	80	75
	Minimum	43	43	40	56	43	49	59	56	51	48	49	49	50	63	56	44	42	44	44	48	60	58	51	60	63	62	61	62	59	55	56
Fruit City	Maximum	67	59	54	73	86	89	88	85	83	85	82	79	86	86	80	69	77	75	75	78	71	83	85	86	85	88	80	85	84	80	82
	Minimum	48	45	48	45	56	60	62	65	60	66	52	49	63	68	59	49	55	52	47	51	58	61	65	64	64	68	63	66	66	59	63
Gano	Maximum	71	48	53	76	86	90	90	83	85	93	71	88	90	85	72	73	66	72	76	81	71	82	89	90	91	91	79	82	80	78	78
	Minimum	45	45	45	42	58	61	60	61	52	67	47	46	53	62	51	44	55	58	42	51	56	60	52	65	63	61	61	61	61	57	55
Hollister	Maximum	58	56	58	64	66	88	78	86	88	90	70	86	84	86	70	70	74	78	84	82	80	84	86	92	88	86	88	86	90	86	88
	Minimum	48	46	48	40	50	66	54	58	60	66	58	60	64	66	48	42	60	50	50	48	50	52	54	68	70	74	76	78	86	76	72
Ironton §§	Maximum	64	50	56	75	85	88	87	83	82	92	67	79	87	86	78	68	76	70	75	81	74	84	87	89	89	90	83	85	82	82	77
	Minimum	61	47	47	44	62	55	55	62	44	67	41	46	51	59	51	48	35	51	40	45	59	63	52	59	63	62	71	63	61	58	51
Lebanon §§	Maximum	56	49	62	80	85	88	88	82	86	70	60	79	90	89	62	80	78	75	78	85	80	83	87	93	92	90	78	83	87	84	80
	Minimum	42	46	44	42	46	56	60	60	59	62	44	47	53	61	47	42	43	50	45	51	51	58	56	58	65	61	64	62	63	56	58
Mountain Grove §§	Maximum	52	50	54	74	85	87	85	82	82	88	56	82	87	82	78	66	73	69	74	75	69	81	83	85	87	87	78	85	79	80	75
	Minimum	52	45	44	41	49	58	60	61	57	60	53	46	55	65	48	42	...	47	43	53	56	57	56	63	63	66	68	57	64	57	58
Neosho	Maximum	70	57	65	77	86	84	86	86	85	84	73	84	86	86	69	69	75	68	75	77	77	83	88	89	86	86	84	84	82	81	82
	Minimum	45	47	44	40	51	62	62	61	61	68	47	58	60	58	42	39	43	49	48	47	58	58	53	65	60	69	63	64	61	64	57
Rolla §§	Maximum	51	48	56	76	88	88	89	83	82	88	66	80	76	83	71	66	72	73	74	79	73	83	85	90	89	89	71	83	79	83	74
	Minimum	49	46	45	42	45	60	63	62	54	56	47	50	53	54	45	41	43	45	43	51	59	60	53	55	66	67	63	60	59	57	57
Springfield	Maximum	61	50	54	73	83	82	87	79	83	82	58	82	86	79	63	64	70	66	72	73	74	78	83	87	84	87	76	83	78	77	76
	Minimum	44	45	42	43	59	62	62	67	63	58	45	53	66	58	46	44	48	51	50	55	58	60	60	66	66	68	62	66	60	59	61
Southwest Plain.																																
Amoret	Maximum	61	56	61	78	84	86	87	76	88	88	68	63	86	88	66	68	66	74	74	77	86	82	85	94	86	88	80	81	80	80	80
	Minimum	43	45	37	42	52	61	65	59	54	66	47	49	52	57	41	41	45	50	46	53	54	55	59	64	63	70	59	57	59	55	60
Clinton	Maximum	65	60	62	77	87	86	89	82	87	83	70	60	87	80	68	69	70	71	76	79	79	84	88	94	91	87	83	82	83	87	79
	Minimum	45	48	42	42	54	62	61	60	55	65	50	50	54	61	45	44	45	46	46	54	59	64	58	65	66	69	60	62	60	58	58
Harrisonville §§	Maximum	60	53	60	78	85	86	86	76	87	81	72	66	87	72	65	67	68	67	77	79	83	69	86	92	89	90	76	83	81	83	78
	Minimum	44	44	37	41	49	56	63	59	56	61	48	50	48	56	44	42	43	45	48	54	59	54	59	60	65	69	63	55	60	57	63
Lamar §§	Maximum	60	51	60	77	86	85	87	82	87	82	58	80	87	77	69	70	71	71	76	78	78	84	88	91	87	89	76	83	83	82	82
	Minimum	45	45	43	42	50	60	66	65	62	65	53	46	57	67	43	41	46	50	49	54	59	60	58	65	65	69	69	64	60	59	62
Lamonte	Maximum	59	54	58	74	84	75	87	76	85	79	69	55	85	75	68	65	67	67	71	77	28	83	83	92	88	82	78	80	80	81	79
	Minimum	44	44	42	43	49	47	52	47	49	52	41	49	52	62	46	41	45	41	46	54	60	56	60	66	66	63	57	68	60	55	60
Marshall	Maximum	59	57	58	74	83	83	86	82	83	81	71	55	84	....	....	65	66	65	70	78	77	79	80	90	89	86	81	81	80	....	74
	Minimum	44	43	46	39	50	58	62	57	48	48	48	48	50	....	....	42	46	41	47	51	60	59	55	67	65	69	56	55	60	....	58
Warrensburg	Maximum	61	52	60	78	89	87	91	81	88	82	70	55	89	81	67	67	68	90	70	82	81	84	89	95	92	91	80	84	81	84	80
	Minimum	44	47	41	45	54	62	63	54	54	67	48	49	51	61	44	42	47	43	48	53	59	56	59	66	69	70	54	57	60	56	64
Warsaw	Maximum	68	63	52	58	78	87	86	91	78	87	85	66	62	90	81	68	67	70	71	73	82	79	83	87	94	91	88	79	85	81	81
	Minimum	45	46	44	38	45	53	56	60	52	63	44	50	51	61	47	41	39	45	42	50	59	51	50	60	64	72	65	65	60	55	55
Northwest Plateau.																																
Avalon	Maximum	60	53	58	75	82	83	85	80	83	79	72	64	75	73	68	63	64	67	61	77	77	80	80	88	87	87	83	82	80	84	75
	Minimum	43	43	45	42	53	63	64	58	53	65	50	50	51	51	46	42	46	40	50	55	63	58	65	70	65	70	65	60	60	65	60
Grant City	Maximum	58	54	62	79	86	96	91	93	89	84	74	67	60	70	65	63	67	65	64	68	74	76	78	88	89	86	79	82	79	84	71
	Minimum	38	39	39	41	49	58	48	49	49	45	45	46	47	52	49	42	42	45	37	48	59	54	56	58	62	68	59	55	60	56	61
Kansas City	Maximum	59	53	61	77	84	85	86	74	86	77	67	53	85	72	63	65	65	66	68	75	78	80	79	91	87	87	75	80	80	80	77
	Minimum	43	44	42	48	61	66	66	60	59	60	52	47	52	52	45	46	51	45	52	56	61	58	60	70	69	65	59	62	61	63	63
Kidder §§	Maximum	49	53	58	75	81	83	86	74	82	72	65	52	71	69	60	62	61	62	56	72	76	75	76	87	85	85	68	81	87	80	73
	Minimum	38	40	39	41	51	51	61	50	51	60	48	48	48	50	44	42	43	39	38	48	50	55	54	56	62	63	60	58	59	57	56
Lexington §§	Maximum	62	54	60	75	84	87	85	77	85	77	70	53	84	68	65	67	68	66	68	80	80	81	80	90	90	89	73	81	80	82	78
	Minimum	43	44	39	45	55	64	65	57	55	71	49	50	50	61	45	45	49	43	51	54	60	55	59	68	66	71	66	56	61	56	62
Maryville §§	Maximum	60	56	63	81	86	92	87	79	85	70	64	52	61	71	57	65	67	65	58	68	76	79	78	89	87	82	80	82	81	83	76
	Minimum	37	37	38	41	44	48	58	48	49	56	44	47	47	49	41	41	41	35	37	48	52	52	55	59	64	69	57	55	59	55	59
Oregon	Maximum	54	54	58	70	80	86	85	79	80	78	62	62	68	68	59	64	65	65	58	60	73	74	73	85	83	81	74	80	76	81	73
	Minimum	38	39	40	44	51	61	63	48	53	59	47	47	47	56	40	40	41	39	47	47	55	51	56	63	65	69	58	51	59	57	60
St. Joseph	Maximum	59	55	61	80	85	90	87	78	88	77	67	55	72	72	60	65	65	64	60	70	77	79	78	91	87	85	77	82	80	82	77
	Minimum	40	42	40	48	54	66	66	53	56	55	48	48	50	52	44	43	47	42	50	56	59	54	58	66	69	72	61	57	64	55	62
Trenton	Maximum	57	56	57	74	80	81	83	82	82	82	64	63	67	71	70	62	65	63	61	75	76	74	77	85	87	89	80	80	79	80	78
	Minimum	40	40	37	39	51	60	63	54	63	61	59	48	49	59	45	45	46	41	51	52	61	56	57	62	64	68	62	58	63	58	62

. .. ... etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charg

the preceding day, on which it almost always occurs.

Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
F

S Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

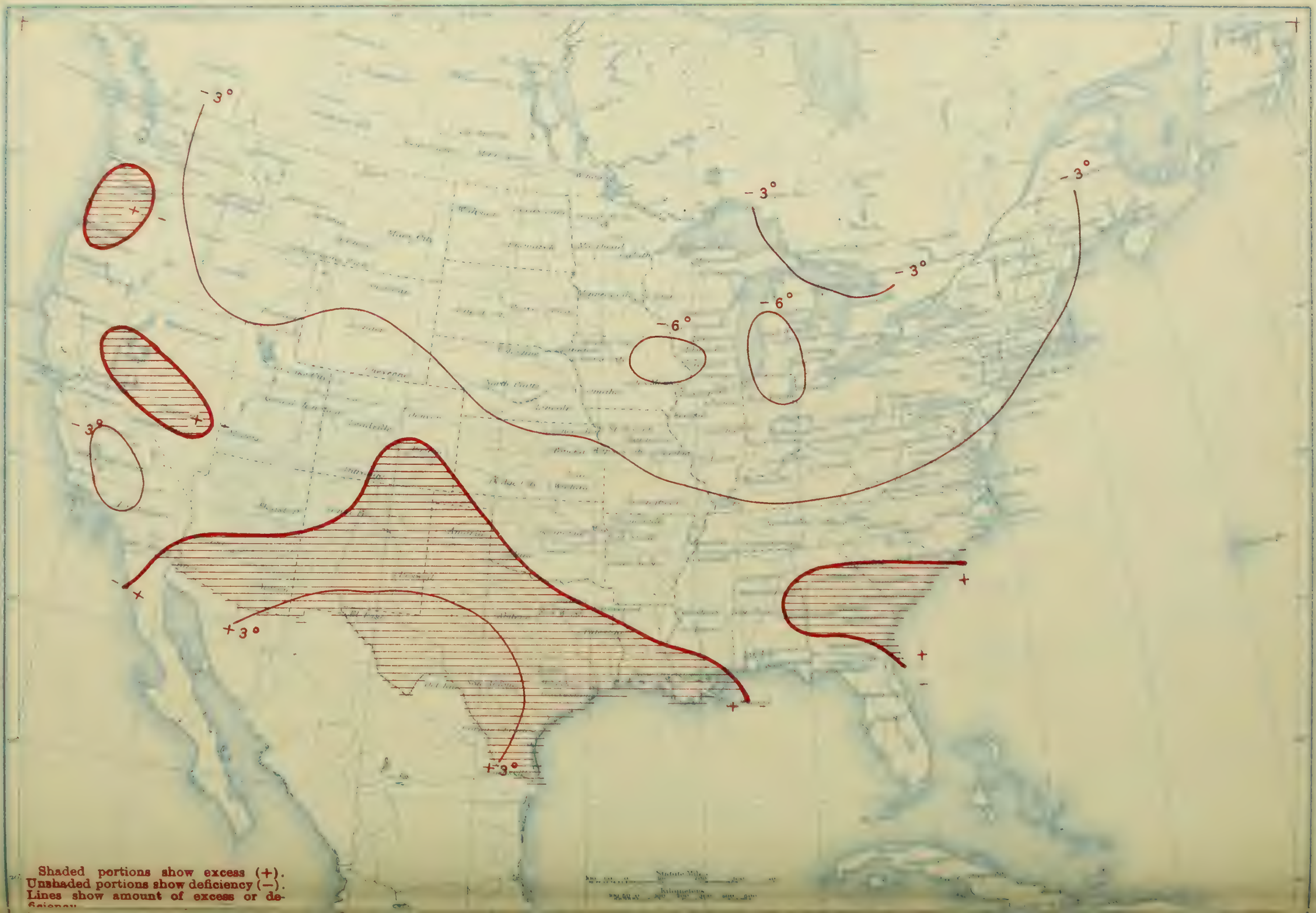
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JUNE, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JULY 21, 1916.

Departure of the Mean Temperature from the Normal, June, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XX. Columbia, Mo., June, 1916. No. 6.

GENERAL SUMMARY.

ne, 1916, was a month of continued cool, cloudy and wet her until the last week in all parts of Missouri; and was st a counterpart of the same month in 1915, except the of the present month were not as heavy as last June along orthern slope of the Ozark plateau. The weather was very able for all grasses, but was rather too cool for best corn th until near the close of the month.

e monthly mean temperature was below normal at all sta- . The highest temperature reported was 100°, at Steffen- on the 30th, which was the warmest day of the month; 99° occurred at Jackson on the 22d, and at Warrensburg e 30th. This was a few degrees higher than June a year but is 12° or 13° below the State's absolute record for June.

e precipitation for the State as a whole, and also for each ion, was above the average, the excess being marked in the east lowlands, and the southwest plain. By counties, ver, the rainfall shows a less even distribution. In the k region, along its northern slope from about McDonald ty northeast, including the lower part of the Osage, and f the Gasconade watersheds, to and across the Missouri r to Boone, Audrain, Callaway, Montgomery, and Warren ties there was quite a marked deficiency. At Jackson, in outheast, and Lamar, in the southwest, the total monthly exceeded 12 inches, which also was the greatest for the during the month.

ere was very little damage from hail, although thunder- ns were frequent during the first three weeks. During the t of the 18–19th, an excessively heavy rain fell in Joplin, rted by the local newspaper as 6 inches, which resulted in damage to the telegraph and telephone services, railroads, s, and the zinc mines. The damage, as estimated by the papers, exceeded $250,000.

TEMPERATURE.

e monthly mean temperature, 62 stations reporting, was The mean departure from the normal for 49 stations hav- 10 or more years' record was minus 3.2°. The mean tem- ture and departure from normal for each division were as ws: northeast plain, 68.9°, or 4.2° below normal; south- lowlands, 73.3°, or 1.9° below normal; Ozark plateau, °, or 2.5° below normal; southwest plain, 70.8°, or 2.9° w normal, and northwest plateau, 68.5°, or 3.7° below al. The highest local monthly mean was 76.3°, at Ca- ersville, and the lowest was 65.0°, at Unionville. The high- emperature recorded was 100°, at Steffenville on the 30th, the lowest was 42°, at Marshall on the 8th, and at Oregon he 9th. Temperatures of 90° or higher occurred on an age of 4 days.

PRECIPITATION.

e average precipitation, 74 stations reporting, was 6.99 es. The departure from the normal for 65 stations having r more years' record was plus 1.17 inches. The average ipitation and departure from normal for each division were ollows: northeast plain, 4.85 inches, excess 0.35 inch; east lowlands, 8.29 inches, excess 4.11 inches; Ozark Pla- . 5.37 inches, excess 0.54 inch; southwest plain, 7.25 es, excess 2.31 inches, and northwest plateau, 5.37 inches, s 0.52. The greatest local monthly amount was 12.81 es, at Jackson, and the least was 2.52 inches, at Warren- The greatest amount in any 24 consecutive hours was inches, at Lamar on the 10th; amounts of 2.50 inches or in twenty-four hours fell at 10 or 12 other stations.

The average number of days with 0.01 inch or more precipitation was 10.

WIND.

The prevailing winds were from the southwest. High wind and excessive rainfall caused considerable damage in Joplin, Jasper county, on the 18th; and fresh to strong winds occurred on several days, but as a rule the month was unusually free from damaging storms.

SUNSHINE AND CLOUDINESS.

During the first half of the month cloudiness was excessive, but the latter half experienced nearly normal sunshine. For the State as a whole the monthly sunshine averaged about 70 per cent of the possible, or about 2 per cent below normal.

MISCELLANEOUS PHENOMENA.

Hail—June 2d and 18th. Halos, solar—June 3d, 4th, 13th, 14th, 20th, 23d, 25th, 26th and 27th. Thunderstorms occurred in some part of the State every day from the 1st to the 26th; and they were more or less general on the 2d, 20th, 22d and 23d.

ERRATA FOR MAY, 1916.

Birchtree, monthly mean temperature should be 66.2. Lamar, mean minimum temperature should be 56.1; and the monthly mean, 67.0. Trenton, days with 0.01 inch or more precipitation, 18. Unionville, mean maximum temperature should be 71.4; highest temperature, 86 on the 25th. Warsaw, mean maximum temperature, 78.1; monthly mean, 65.8; highest temperature, 94 on the 24th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean Relative Humidity.		Sunshine.		Wind.				
								Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.86	85	......	285	64	5,368	7.5	36	w.	12
Hannibal	29.86	80	......	......	......	6,033	8.4	35	nw.	7
Kansas City	29.87	78	59	334	75	8,103	11.3	45	n.	6
St. Joseph	29.87	84	56	312	69	5,714	7.9	35	nw.	8
St. Louis	29.87	75	60	308	69	8,660	12.0	43	se.	22
Springfield	29.89	84	67	261	59	6,868	9.5	35	w.	8
Cairo, Ill	29.87	82	70	......	......	5,316	7.4	50	sw.	18
Keokuk, Iowa	29.87	82	69	315	70	5,345	7.4	44	se.	23

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	72.6	−0.5	103	37	6.20	+1.26	......	0	7	....	....	....
1889	70.7	−2.4	100	38	4.66	−0.28	......	0	6	....	....	....
1890	77.2	+4.1	105	50	2.59	−2.35	......	0	6	....	....	....
1891	73.3	+0.2	103	46	6.94	+2.00	......	0	13	....	....	....
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.69	0	9	12	12	6
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0	9	12	11	7
1897	73.6	+9.5	102	38	6.18	+1.24	6.40	0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	8.15	0	9	13	12	5
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	−2.81	2 99	0	6	18	10	2
1902	70 9	−2.2	100	37	6 57	+1.63	6.08	0	12	11	10	9
1903	67.3	−4.2	95	36	3.25	−1.69	4.90	0	9	15	9	6
1904	70.5	−2.6	93	45	6 42	+1.58	5.41	0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0	7	15	10	5
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	0	9	14	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3 05	T	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0	12	11	10	9
1916	70.0	−3.2	100	42	6.99	+1.17	6.75	0	10	14	9	7

Climatological data for June, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain																				
Boonville	Cooper	600	39	......	......	......	......	......	......	......	4.57	−1.38	1.50	0	12	18	1	11	nw.	C. Randecker.
Brunswick	Chariton	652	36	69.0	−4.4	92	30	51	7†	31	7.70	+2.01	3.75	0	9	14	1	15	nw.	Louis Benecke.
Clifton Hill	Randolph	731	....	68.3	......	96	30	51	7†	27	4.94	......	3.13	0	7	9	17	4	......	L. S. Harlan.
Columbia	Boone	784	26	69.0	−5.5	93	30	52	10	26	3.64	−0.74	1.83	0	11	9	13	8	w.	U. S. Weather Bureau.
Fayette	Howard	725	31	69.2	−4.0	94	30	52	6	26	5.55	+0.87	2.23	0	6	......	......	......	......	Prof. T. B. Smith.
Fulton	Callaway	818	24	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Dr. C. W. Knapp.
Gorin	Scotland	700	27	......	......	......	......	......	......	......	5.52	+1.89	2.80	0	10	9	10	11	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	68.0	−5.3	94	30	51	7	26	5.56	+2.04	2.01	0	13	12	10	8	sw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	......	......	......	......	......	......	......	3.39	−1.16	0.88	0	11	13	6	11	w.	C. T. Mausbund.
Jefferson City	Cole	628	30	71.2	−2.9	95	30	52	9†	42	2.63	−1.65	1.02	0	12	19^{b}	0^{b}	9^{b}	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	......	......	......	......	......	......	......	4.72	......	1.88	0	9	......	......	......	......	J. T. Dewey, M. D.
Louisiana	Pike	500	38	68.8	−2.8	96	30	52	10†	32	5.31	+1.12	2.05	0	13	10	16	4	nw.	J. T. Farrell.
Macon	Macon	881	18	67.6	−4.5	93	30	50	7	33	7.08	+2.16	2.20	0	14	15	7	8	nw.	John A. Cook.
Mexico	Audrain	797	38	69.0	−4.6	96	30	51	6†	36	3.37	−1.97	1.68	0	9	17	0	13	w.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	70.1	−3.7	95	30	51	8	28	6.88	+2.25	3.06	0	9	4	20	6	s.	E. E. Steines.
Palmyra	Marion	652	4	67.0^{a}	......	92	29	51	9	29	5.79	+1.47	1.36	0	12	14	10	6	sw.	W. B. Markell.
St. Catherine	Linn	914	3	67.3	......	91	30	49	9	30	4.58	......	2.48	0	9	16	9	5	nw.	L. D. Baker.
St. Charles	St. Charles	614	38	70.4	−3.2	98	30	50	17	30	4.23	+0.03	1.69	0	7	12	14	4	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	71.5	−3.6	95	30	55	7	26	3.97	−0.50	2.32	0	11	12	13	5	nw.	U. S. Weather Bureau.
St. Louis (2)	do.	578	4	71.0	......	95	30	55	7†	24	3.74	......	1.21	0	14	15	12	3	nw.	St. Louis University.
Steffenville	Lewis	576	23	69.6	−3.3	100	30	51	7	34	5.36	+1.47	2.90	0	8	15	9	6	w.	Frank Hall.
Unionville	Putnam	1,072	23	65.0	−7.2	93	30	45	19	31	4.61	+0.43	1.80	0	9	18	3	9	n.	Geo. W. Davis.
Warrenton	Warren	865	25	70.2	−3.4	97	30	52	9	35	2.52	−2.01	1.04	0	7	8	12	10	nw.	Prof. J. H. Frick.
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	......	......	......	......	......	......	......	7.83	+4.14	2.00	0	12	20	3	7	w.	D. L. Albert.
Cardwell	Dunklin	225	5	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	F. E. Tate.
Caruthersville	Pemiscott	220	25	76.3	−1.0	98	30	54	8	34	9.45	+5.49	2.67	0	9	24	3	3	w.	H. E. Averill.
Doniphan	Ripley	440	11	72.1	−2.7	95	30	48	9	34	8.12	+3.90	3.00	0	13	12	7	11	nw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	72.3	−1.5	99	22†	51	4†	40	12.81	+8.57	3.36	0	13	6	12	12	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	......	......	......	......	......	......	......	6.70	+2.60	1.75	0	12	18	3	9	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	......	......	......	......	......	......	......	7.48	......	3.43	0	5	17	0	13	s.	George F. Ellis.
Poplar Bluff	Butler	333	12	71.8	−3.5	94	23	49	9	31	6.85	+1.53	1.98	0	13	19	3	8	......	Albert E. Cox.
Sikeston	Scott	328	15	74.0	−0.6	96	30	53	4	36	7.37	+2.99	2.61	0	9	17	10	3	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	73.1	−2.1	93	30	57	8	25	8.00	+3.69	1.59	0	13	7	14	9	n.	U. S. Weather Bureau.
Ozark Plateau																				
Arlington	Phelps	695	14	......	......	......	......	......	......	......	2.88	−0.66	0.60	0	10	17	4	9	s.	G. V. Randolph.
Bagnell	Miller	594	....	......	......	......	......	......	......	......	3.80	−1.10	1.45	0	8	11	10	9	w.	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	70.0^{a}	−2.7	92	30	47	9	30	5.56	+0.94	1.40	0	12	17	7	6	w.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	71.1	−1.9	94	29†	50	9	32	4.69	−0.87	1.65	0	7	21	5	4	ne.	A. C. Fink.
Cassville	Barry	1,500	5	69.9	......	88	3	44	9	41	7.62	......	4.68	0	6	19	7	4	s.	Mrs. Zuma Bloomer.
Crocker ††	Pulaski	1,300	5	70.5^{b}	......	89	4†	51	4	38	2.88	......	2.07	0	4	25^{b}	0^{b}	3^{b}	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	68.9	−4.1	92	29	45	8†	34	4.94	−0.65	1.59	0	11	19^{a}	4^{a}	6^{a}	sw.	H. E. Dean.
Eldon	Miller	934	15	70.6	......	94	30	49	7	31	2.91	−1.90	1.32	0	6	9	16	5	sw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	71.0	......	94	30	51	7†	32	5.55	......	1.40	0	11	23	2	5	e.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	70.0	−2.8	96	30	50	9†	35	4.23	−0.12	1.48	0	9	15	11	4	sw.	A. C. Leach.
Goodland	Iron	1,000	11	68.2	−2.6	94	30	44	10	38	3.50	−0.03	1.40	0	5	10	14	6	s.	F. M. Adams.
Hollister	Taney	1,000	7	74.8	......	94	29	52	15	30	8.15	+4.08	2.40	0	8	20	0	10	se.	W. P. Chapmann.
Houston	Texas	1,280	23	70.4	−1.5	95	30	50	10	29	6.16	+1.15	1.50	0	8	21	5	4	nw.	R. F. Harmon.
Ironton	Iron	925	38	69.6	−2.4	95	30	45	10	37	3.84	−1.24	1.40	0	11	5	16	9	ne.	W. H. Delano.
Koshkonong	Oregon	911	15	71.8	−2.4	90	30	52	8†	27	6.24	+2.11	1.47	0	11	11	8	11	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	70.6	−2.7	97	30	50	9	36	5.44	−0.07	2.50	0	9	15	7	8	s.	Earl J. Breech.
Lockwood	Dade	1,088	21	71.2	−3.1	91	21†	51	9	27	8.03	+3.59	2.48	0	10	15	10	5	se.	C. S. Crow.
Mountain Grove	Wright	1,490	17	69.8	−2.0	91	30	50	7†	29	6.91	+2.61	2.42	0	11	6	9	15	sw.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	J. R. White & Son.
Neosho	Newton	1,083	33	71.6	−2.2	91	29	46	9	35	7.35	+1.82	1.65	0	13	21	5	4	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	69.8	−2.8	95	27†	51	9	34	4.51	+0.22	1.93	0	9	12	15	3	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	70.0	−2.3	88	30	53	7	24	5.00	−0.19	1.61	0	11	13	12	5	se.	U. S. Weather Bureau.
Southwest Plain																				
Amoret	Bates	850	7	70.8	......	90	24	48	7†	33	7.23	......	1.78	0	11	14	7	9	sw.	Darby Fruit Farm.
Clinton	Henry	800	29	71.4	......	95	29†	52	7†	40	5.23	+0.27	1.93	0	6	12	16	2	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	70.1	−3.1	93	29†	48	7	30	7.13	+2.50	2.64	0	11	12	4	14	ne.	A. J. Sharp.
Lamar	Barton	964	35	71.8	−2.1	93	29	51	9	30	12.76	+7.86	6.75	0	10	19	4	7	se.	Dick B. Houston.
Lamonte	Pettis	863	27	70.4	......	94	30	50	8	29	5.85	+1.05	2.50	0	5	14	14	2	sw.	J. Ed. Hall.
Marshall	Saline	779	25	69.0	−3.8	95	30	42	8	31	6.45	+1.75	2.53	0	11	17	10	3	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	71.8	......	92	29†	49	9	31	6.95	+1.63	2.80	0	9	19	8	3	sw.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	......	......	......	......	......	......	......	7.23	+2.67	2.90	0	9	14^{d}	2^{d}	10^{d}	......	W. E. Mathews.
Warrensburg	Johnson	883	37	71.6	−2.4	99	30	48	8	32	6.07	+1.09	4.48	0	9	12	11	7	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	70.4	−3.4	95	30	49	9	32	7.20	+1.94	3.45	0	12	10	19	1	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	......	......	......	......	......	......	......	7.70	......	5.48	0	11	11^{a}	9^{a}	9^{a}	nw.	John W. Cauthorn.
Northwest Plateau																				
Avalon	Livingston	730	30	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	F. G. Ashbaugh.
Bethany	Harrison	881	26	67.5	−4.5	95	30	46	7	32	6.90	+2.61	2.25	0	8	7	18	5	sw.	M. H. Moulton.
Chillicothe	Livingston	......	1	......	......	......	......	......	......	......	8.08	+1.30	4.60	0	8	17	0	13	......	Hocey O. Dupy.
Conception	Nodaway	982	31	67.3	−3.4	89	30	48	7	29	4.29	−0.15	1.38	0	11	6	21	3	nw.	Fr. Adelhelm Hess.
Grant City	Worth	1,130	23	67.6	−3.6	95	30	47	7	33	5.29	+1.03	1.60	0	6	19	6	5	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	70.5	−2.5	91	30	52	6	22	5.51	+0.85	2.70	0	11	16	10	4	n.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	66.4	−5.8	92	29	48	7†	31	4.67	+0.22	2.50	0	13	14	11	5	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	70.2	−2.0	93	30	49	7	27	4.69	−0.38	2.25	0	11	17	0	13	s.	J. W. Keithley.
Liberty	Clay	864	27	71.4	−1.9	95	30	50	8	32	7.02	+1.81	2.65	0	8	18	10	2	s.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	67.2	−4.0	94	30	48	3†	33	4.43	−0.58	1.34	0	13	16	2	12	w.	J. R. Brink.
Oregon	Holt	1,113	60	67.2	−5.1	92	29	42	9	33	4.70	−0.04	2.50	0	8	12	15	3	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	69.6	......	92	30	51	8	29	3.34	−1.75	1.75	0	10	12	15	3	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	68.4	......	90	30	46	7	32	5.71	......	1.89	0	11	20	6	4	nw.	John F. Frazier.
Trenton	Grundy	812	21	68.7	−3.8	92	30	50	7	26	5.17	+1.33	2.28	0	8	13	10	7	n.	W. H. Estes.
State means and extremes		......	....	70.0	−3.2	100	30	42	8†	42	6.99	+1.17	6.75	0	10	14	9	7	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for June, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
heast Plain.																																	
ile	Missouri		.43		.02		1.50	.60	.04	.06		.06	.03				.72				.30	.12			.69								4.57
ick	Grand			T.	.12		3.75	.78				.10					.05				.15	.65			2.03		.07						7.70
Hill	Chariton					.58	2.55		.02							.13					.66			.99	.01								4.94
ia***	Missouri		.50			1.21	.84	.04	.01			.03		.01		.15			T.	T.	.19		.04	62									3.64
	......do		.48			1.00	1.73									.29					.60			1.45									5.55
	......do																																....
	Mississippi	.33				.03	2.80		.02	.63						.12			.18		1.02		.05	.34									5.52
al***	......do	.86	.02			.40	1.62	.13	.05	.22	T.			T.		.25	.33	.03	.40		1 07		T.	.18									5.56
m	Missouri	T.		.78			.88	.37	.05	.02		T.	.05		.01	.24	.06			T.	T.	.19			.74								3.39
n City	......do		.60				1.02	.12	.02	.02		.09	.06		.02		.02				.03	.11			.52								2.63
ille	Chariton	.10	.05			.65	1.88	.02				.01				.05					.63				1.33								4.72
na	Mississippi	.62	.02			.01	2.05	.04	.12	38	.20	T.				.21	.01		.29		.98			.38									5.31
	Chariton	.59			.01		2.20	1.30	.03	.03					.01		.02	.03	.08	.13	.61	.51		T.	1.53								7.08
	Mississippi			.18			1.68	.19	.03	.05					T.		.09	T.		T.	T.	.38		.61	.16								3.38
l	Meramec		.91			.32	1.17	T.	.04			.58		T.	T.	T.	.06			.06	T.		3.06	.68									6.88
n	Mississippi	1.03		T.			1.36	.73	.07	.08	.36						.12	.29	.07	.27		1.18			.23								5.79
erine	Grand				.04	.18	2.48	T.	.03							.02	.02		.04		.87	T.		.90									4.58
rles	Missouri		.55				1.09	T.	.01			.27			T.	.01			T.		T.		1.69	.61									4.23
is (1)***	Mississippi		.80		T.	1.35	1.01	.02	.02			.32			T.	T.	.06		.01	.01	T.		.11	.26									3.97
is (2)	......do		.75			1.21	.65	.05	.01			.35			02	.01	.10		.07	.01	.01		.30	.20									3.74
ille	......do	.70				T.	2.90	.03	.07	T.				T.		T.	.40		.16		.90	T.	.20										5.36
	Grand	.50	T.				1.10	.70	T.	12	T.						T.		.20	T.	T.	60	.10	1.04	.25								4.61
ton	Mississippi			.30			1.04	.31	T.	T.		T.	.08		T.		.07	.01				T.			.21								2.52
ast Lowlands.																																	
irardeau	Mississippi			.20			2.00	.73				.20	1.20		.05		.90		.05		.25			.30	1.05	90							7.83
ll	......do																																.....
rsville	......do	T.	.04	.02		T.	1.22					1.36	T.	T.	.11					2.00	1.60			2.67			T.	.43					9.45
an	Black		.87			3.00	.30					1.05			.10		.12	.05	T.	.35	.56	.10		1.47	.05	..	.10						8.12
	Mississippi		.86		2.54	.21					1.25			.10	15	3.36		.01		.25			2.60	.45	.60						.58		12.81
Hill	......do																																......
drid	......do	.01				.01	1.10	.05				.03	1.35							.01	.55			1.75	1.35	.25		.24					6.70
(near)	......do					3.43						.70				1 40					1.70			.25									7 48
Bluff	Black			.59		.03	1 98	.17				.06	.92		.04	T.	.08				.47			.83	.27	.13		1.28					6.85
n	Mississippi			.02		.56	1.71					1.26			.30		.39		.06					2.61	.46								7.37
ll.***	......do		1.22			.41	1.02				T.	1.59			.07	.03	.06	T.	.32	.38	.61		.82	1.00	.47								8.00
Plateau.																																	
on	Gasconade					.15	.55	.15				.45	.10				.12		.10	.45	60				.21								2.88
	Osage	T.	T.	.05		T.	1.45	09				.60	.34				.84				.36	.07					T.						3.80
ee	Black		.17			1.40	.61					.57			.30		.18	.18	.25	.70	.12			.29	.79		..						5.56
	Osage						1.65				.42	1.08		.07						1.11	.30			.06									4.69
ie	White							T.			.85	1.06		.63	.25			T.		4.68	.15												7.62
r	Gasconade						.31					2.07							.14							.36							2.88
	Neosho					1.59	.20	.04				1.29	.03	.44	.40		.02		.04	.30	.59												4.94
	Osage		.15			1.32	.57				.50									.27				.10									2.91
ity	Black		60			.75	1.40					.80	T.	T.	.40	.05		.05	.15	.75				.40	.20								5.55
	Meramec		T.			.63	1.48					1.01		.15	.06	T.	.03			.40	T.			.44	.03								4.23
nd	Black						1.40					.50					.60			.47				.53									3.50
r	White					2.40					.15	1.20		1.80	.20				.20	1 10						1.10							8 15
n	Gasconade		T.			1.50	.69				T.	.73						.35	.10	1.26	T.			.65	.88								6.16
	Mississippi	T.		.20		T.	1 10	.30		T.			.42		05	.02	.27			.05	.43	T.		.18	.52			T.					3.84
nong	Black		.91			1.25	.23					.80		.30	.03			T.	.09	1.47	.01			1.08	.07								6.24
n	Osage					T.	2.50					.92	10		.10	.02				.60	.80	.20			.20								5 44
ood	......do					1.86	58				.12	2.48		.23				.22		1.72	.51				.06		.25			T.			8 03
in Grove	White	..				.06	2.42	.18	T.			.32	.36						.18	1.32	.78	.10			1.11	.08							6 91
Vernon	Neosho																																......
	......do	T.	T.			1.65	.24				.35	1.04		.25	1.30			.06	.06	1.39	.47			.05	.35		.14						7.35
	Meramec			T.		T.	1.93	.42	T.			.21	.90		T.		.06			.20	.49	.03			.27								4.51
eld ***	White					1.56	.31	T.			.18	.48		.13	T.			.10	.50	1.10	.12		.02	.50	T.	T.	T.						5.00
and	Osage																																......
west Plain.																																	
	Osage				.11	1.78	1.11				.70	1.11		.12		.27				.97	.41			.10			.55						7.23
on City	......do																																......
	......do					1.93	.62				.20	1.30								.90							.28						5.23
onville	......do	.11				.01	2.64	.06				1.35	.21		T.	.34				.61	1.43	.01					.36						7.13
	Neosho					.34	2.57					6.75	.05		.23				.17	.38	1.43	.18			T.		.66						12 76
te	Missouri		T.		T.	2 00	2.50					.75					T.			.30	.30		T.	T.		T.	T.						5.85
all	......do		.34		.04	1.32	2.53	.01	T		T.	.30		T.		.63	.10		T.	.12	59			.47		T.	T.						6.45
	Osage					2.80	.35				.32	1.00		.20		.06				1.15	.63						44						6.95
	......do					.32	2.90	.10				1.45	.35			.62	.23			.31	.95												7.23
sburg	Missouri		.03			2.61	1.87	T.	T.		.06	.67		T.		.04				.43	.29						.07						6 07
	Osage		T.			.16	3.45	.32	T.			.95	.24		.11	T.	.47			.17	.95	.19			.08	T.	.11						7.20
ly	Missouri	.05	.03		.07		5.48	.47	T.			.06					.12				.72	.03			.65		.02						7.70
west Plateau.																																	
	Grand																																......
y	......do	1.80	T.	T.	.13	.13	1.46	T.	T.			T.		T.		.02			.30		.81			2.25									6.90
othe	......do				.10		4 60	.90				.06									.77	.05		1.10	.50								8 08
tion	Missouri	.70		.08		.07	67	T.			T.	.13		.17	.03	.04			.26		.76			1.38									4.29
ity	Grand	1.60		.35		T.	1.08	T.	T.		T.					T.			46		.86			.94									5.29
City***	Missouri		.15	.29		2.04	66				.17	62		.01						.37	.86			.08			.26						5.51
	Grand	.05			18		2.50	.16				.15			.01		.07			.12	.90	.05		.02	.45		.01						4.67
ton	Missouri	.04		.11	.10		2.25	.40				.56	.08								.82	.05			.26		.02						4.69
	......do				.40	.75	2.65	T.	T.		T.	.72		T.		T.				.37	1.47			.44			.22						7.02
ille	......do	.42			.05		.52					.15		T.		.13	.06		.25		.95	.45	.03	1.34		.02	.06						4.43
	......do			.19			.48				.40			.14	T.				.25		.59			2.50			.15						4.70
ph***	Missouri			.14		.97	.78	T.	T.		.17	.17		.09		T.			.20	T.	.55			.17			.10						3.34
	......do	1.81		.04		.01	.11					.25		.01					.31	.01	.70			1.89			.57						5.71
n	Grand			.14		2.13	.15		T.		T.			.10		T.	T.		.02		.56		1.64	.43									5.17
																																	......

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

. Trace, or less than 0.01 inch.

** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

Precipitation in the next following measurement.

Separate dates of fall not recorded.

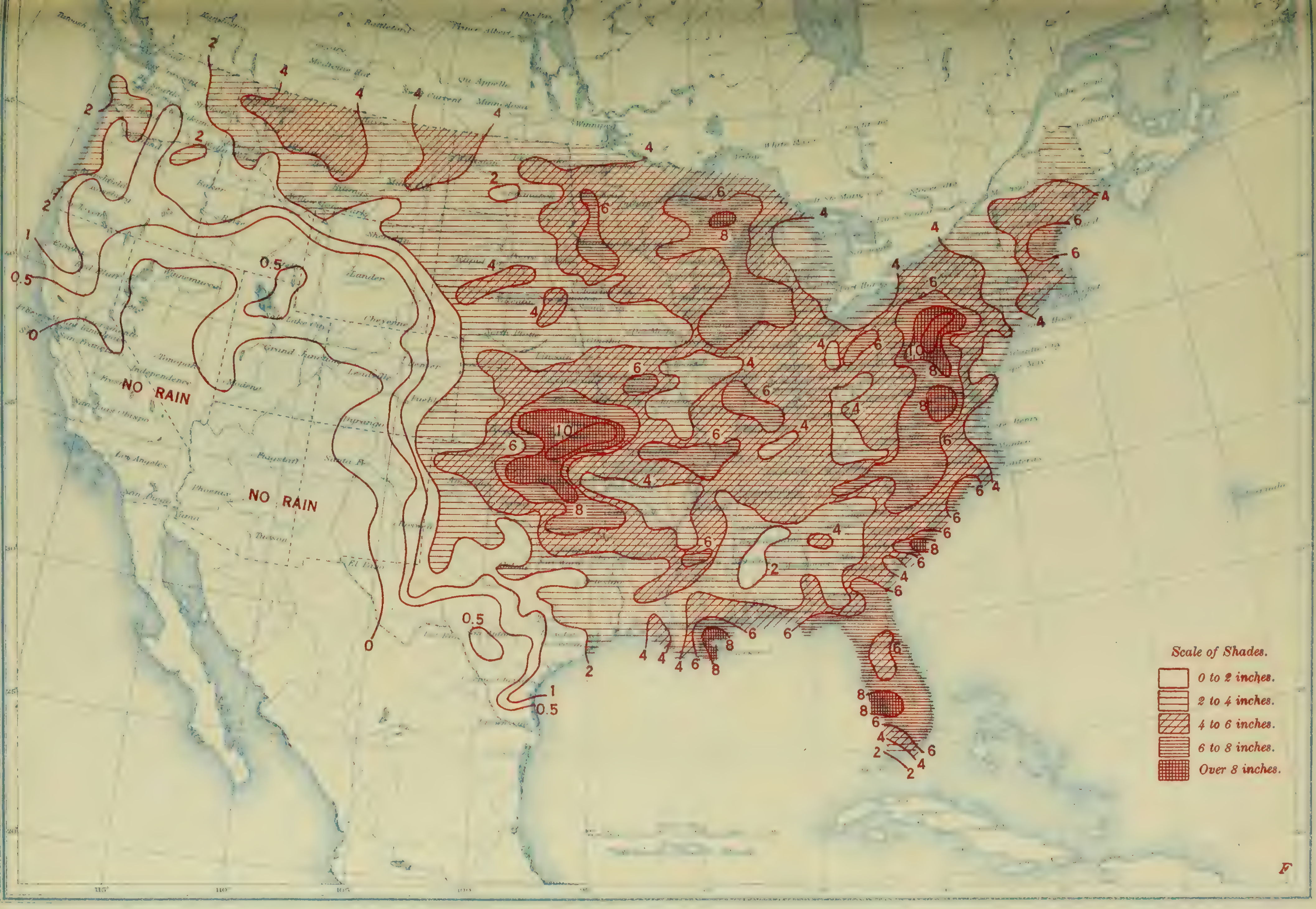
Daily temperatures for June, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	85	75	77	82	64	67	71	66	75	77	76	78	78	81	79	75	80	78	71	80	74	90	77	82	83	83	82	85	91	92	....
	Minimum	63	64	56	57	61	54	51	51	53	55	61	58	59	63	58	55	54	56	56	59	59	59	69	60	62	69	60	62	66	71	....
Columbia	Maximum	86	77	75	81	66	62	70	67	73	78	72	78	77	80	80	72	77	79	68	84	74	90	79	80	82	83	81	86	91	93	....
	Minimum	66	61	56	59	58	53	53	57	54	52	61	56	62	60	59	55	54	63	58	62	58	65	67	59	60	67	66	63	68	70	....
Fayette	Maximum	85	77	76	82	64	63	72	67	74	78	73	79	77	80	79	74	80	78	70	82	74	90	75	83	86	85	81	87	90	94	....
	Minimum	66	64	56	59	55	52	53	57	53	54	60	58	61	62	59	54	56	62	57	62	58	67	66	62	62	67	60	61	66	70	....
Hannibal	Maximum	84	76	75	81	67	60	68	63	73	79	75	78	80	79	80	72	77	74	72	75	70	84	76	81	82	85	81	85	91	94	....
	Minimum	61	60	55	60	58	55	51	54	53	54	61	58	57	61	58	55	53	61	55	59	56	63	66	59	56	68	61	62	65	69	....
Jefferson City §§	Maximum	85	72	78	85	69	70	71	73	81	94	75	86	82	88	85	86	86	92	71	87	76	91	83	85	85	86	83	87	92	95	....
	Minimum	64	62	56	59	63	58	53	53	52	52	63	57	61	59	61	53	54	61	61	59	56	59	68	64	61	65	63	62	65	69	....
Macon §§	Maximum	83	73	75	81	64	61	69	63	74	78	78	80	80	80	79	72	76	75	74	78	72	89	77	80	82	84	81	85	90	93	....
	Minimum	61	63	52	56	60	52	50	53	51	54	60	56	60	63	55	52	51	59	52	56	56	56	65	58	57	65	62	59	64	71	....
Mexico §§	Maximum	88	79	72	85	63	61	71	69	76	81	75	80	81	83	83	76	80	80	71	86	74	93	79	84	86	87	81	88	94	96	....
	Minimum	62	66	53	55	59	51	51	53	52	56	60	54	55	61	57	53	54	55	56	59	57	57	65	60	57	66	59	59	61	68	....
Oakfield	Maximum	85	80	75	84	70	66	72	71	76	81	74	78	79	84	83	74	80	86	73	83	76	90	85	83	81	87	81	85	91	95	....
	Minimum	64	63	56	58	58	56	52	51	53	53	63	58	62	64	59	54	55	60	60	62	57	62	64	64	63	64	63	62	66	72	....
St. Catharine	Maximum	68	77	77	82	76	69	72	65	75	77	76	77	76	80	79	73	77	75	71	73	68	86	83	80	80	84	80	82	87	91	....
	Minimum	50	55	51	52	60	51	50	57	49	51	61	57	61	62	54	65	52	61	51	57	55	62	64	56	59	66	56	61	65	70	....
St. Louis (1)	Maximum	85	79	74	82	69	71	71	71	74	80	70	78	81	80	81	72	79	84	74	83	74	88	86	83	82	87	84	85	91	95	....
	Minimum	64	65	59	62	60	58	55	56	56	60	64	60	66	68	64	59	59	63	63	64	58	62	67	68	66	68	67	65	73	77	....
Unionville §§	Maximum	81	72	75	80	66	62	68	62	73	78	80	79	80	82	71	73	78	72	76	66	73	86	80	77	81	82	82	84	89	93	....
	Minimum	57	56	46	50	53	50	48	50	49	50	56	53	54	60	54	50	48	53	45	50	51	54	56	54	55	60	53	55	60	66	....
Warrenton §§	Maximum	87	79	77	84	66	64	71	69	75	80	69	80	80	82	83	74	80	82	71	87	76	93	87	84	85	88	81	88	94	97	....
	Minimum	60	63	54	57	60	59	53	54	52	57	62	57	59	62	61	53	55	60	57	61	57	58	68	64	61	65	61	62	74	70	....
Southeast Lowlands.																																
Cardwell	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Caruthersville	Maximum	92	87	88	90	87	80	78	83	84	86	80	82	85	80	84	80	86	87	88	91	92	96	90	87	86	91	93	96	95	98	....
	Minimum	68	75	62	56	68	62	55	54	56	67	67	66	64	69	65	65	66	67	64	65	62	62	69	67	66	67	68	70	70	73	....
Doniphan	Maximum	89	87	81	86	79	69	76	79	82	86	76	79	82	81	84	79	82	85	80	87	88	93	87	84	85	89	88	89	93	95	....
	Minimum	64	69	55	53	63	58	50	57	48	54	62	63	60	65	59	58	50	61	62	62	67	66	65	64	62	61	64	61	62	68	....
Jackson	Maximum	89	84	83	91	80	70	75	70	78	84	80	81	84	81	88	76	83	84	80	81	91	99	90	82	80	90	88	89	95	99	....
	Minimum	63	69	58	51	60	58	55	55	56	51	62	59	56	66	57	58	51	60	63	64	66	64	67	66	59	61	65	63	62	68	....
Marble Hill	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Poplar Bluff §§	Maximum	81	90	86	79	87	76	63	76	80	81	85	71	81	84	83	86	79	83	83	81	86	87	94	88	84	86	89	89	89	93	....
	Minimum	61	68	56	52	62	62	50	51	49	55	63	62	60	63	58	58	51	58	63	63	66	65	67	65	62	62	63	63	63	66	....
Ozark Plateau.																																
Birchtree	Maximum	86	85	79	83	76	68	72	....	77	81	75	77	77	80	83	78	79	74	68	82	85	89	85	83	85	82	85	86	90	92	....
	Minimum	63	70	52	53	55	56	52	....	47	53	60	62	60	61	58	57	49	60	60	62	65	64	64	62	60	61	64	60	62	67	....
Cassville	Maximum	86	72	88	82	78	67	75	76	85	75	80	76	78	81	81	80	78	83	80	84	84	84	83	80	85	83	85	84	87	86	....
	Minimum	74	64	49	51	53	50	51	50	44	57	61	58	58	62	58	58	50	64	59	65	57	68	68	67	68	64	59	58	60	63	....
Eldon	Maximum	86	79	76	85	82	65	70	75	71	70	78	76	80	83	84	83	82	89	75	83	80	89	82	86	85	86	85	87	91	94	....
	Minimum	60	59	56	57	56	52	49	51	53	60	53	59	57	52	77	73	68	64	60	60	59	65	67	60	59	63	60	64	62	68	....
Fruit City	Maximum	83	89	76	85	82	74	73	77	80	84	73	81	81	83	75	78	78	82	75	80	82	90	86	83	82	84	80	86	90	94	....
	Minimum	70	72	58	59	57	54	51	51	55	52	58	60	60	61	60	60	55	63	61	63	70	63	63	64	59	58	60	63	65	66	....
Gano	Maximum	88	82	79	86	74	67	70	79	75	83	68	79	81	80	76	72	80	85	70	84	86	90	91	82	87	84	84	91	94	96	....
	Minimum	64	68	54	58	60	53	51	52	50	50	59	58	56	60	57	53	53	60	58	62	61	65	64	64	52	63	63	57	65	68	....
Hollister	Maximum	92	92	86	84	80	76	74	86	82	80	78	80	82	84	82	76	80	82	84	88	92	92	90	88	86	88	90	88	94	92	....
	Minimum	70	74	70	72	68	64	62	60	62	60	58	56	58	56	52	58	58	56	60	58	72	74	76	78	68	68	64	66	68	72	....
Ironton §§	Maximum	87	85	79	86	69	70	73	76	76	82	68	80	82	82	83	74	80	86	77	83	81	92	88	85	84	86	87	88	91	95	....
	Minimum	62	70	56	51	58	63	52	50	50	45	60	56	52	62	53	54	48	56	57	64	64	62	63	65	54	57	61	55	56	63	....
Lebanon §§	Maximum	85	82	75	86	71	68	72	73	78	81	68	82	90	85	83	77	82	89	72	85	96	91	85	84	75	86	82	89	96	97	....
	Minimum	61	62	52	52	62	59	53	53	50	54	58	58	58	58	58	51	53	58	62	63	61	63	69	67	62	63	63	57	60	66	....
Mountain Grove §§	Maximum	86	83	81	86	72	63	70	73	75	80	75	76	78	80	81	72	78	82	74	80	86	87	84	83	80	84	84	85	90	91	....
	Minimum	63	66	52	59	64	54	50	50	51	54	60	59	59	60	57	54	53	62	60	62	63	66	65	64	62	61	63	59	65	67	....
Neosho	Maximum	87	85	82	85	79	72	76	77	81	80	77	81	82	81	81	78	80	85	85	86	89	88	88	85	86	82	86	90	91	90	....
	Minimum	58	68	51	54	63	55	51	53	46	53	62	58	59	64	62	51	52	60	61	64	67	68	70	70	63	64	59	60	63	67	....
Rolla §§	Maximum	86	79	79	85	70	64	70	71	76	80	66	82	78	81	80	72	80	86	69	85	82	90	87	83	84	84	95	89	90	95	....
	Minimum	60	69	55	57	61	60	53	53	51	52	57	58	59	59	59	52	54	53	60	61	61	62	67	65	60	65	63	60	61	61	....
Springfield	Maximum	87	78	79	83	72	66	69	72	75	76	71	74	74	79	78	71	75	82	72	81	87	87	80	81	80	82	81	84	87	88	....
	Minimum	66	62	56	59	61	55	53	55	55	58	63	60	63	62	60	54	55	61	63	61	65	71	65	67	65	66	66	65	68	71	....
Southwest Plain.																																
Amoret	Maximum	88	85	82	86	74	71	73	75	79	74	80	78	80	82	79	75	83	89	79	82	82	87	87	90	88	83	84	87	89	89	....
	Minimum	66	65	56	56	58	53	48	51	48	55	60	56	62	63	61	52	55	59	58	61	59	71	71	57	66	62	61	60	66	68	....
Clinton	Maximum	82	82	82	81	78	71	70	75	79	79	77	81	80	84	80	76	86	87	80	84	82	90	88	88	86	89	87	89	95	95	....
	Minimum	56	58	58	58	60	55	52	53	52	56	60	57	61	62	60	55	55	61	60	63	61	69	73	60	65	65	67	61	55	70	....
Harrisonville §§	Maximum	89	76	82	84	78	72	73	74	79	78	77	83	77	81	82	75	82	80	66	82	80	92	85	86	88	85	85	90	93	93	....
	Minimum	62	64	56	57	62	54	48	49	49	54	58	56	60	62	57	53	53	54	57	57	62	62	72	56	64	63	61	62	67	68	....
Lamar §§	Maximum	88	79	83	86	68	71	74	76	81	76	79	77	75	81	82	75	77	86	75	86	90	90	89	86	87	82	86	90	93	92	....
	Minimum	64	67	56	57	68	55	53	53	51	55	62	59	63	62	62	53	55	61	69	63	63	67	73	67	66	64	66	63	66	69	....
Lamonte	Maximum	87	80	80	80	70	69	71	72	74	75	78	79	78	81	79	78	80	79	83	82	77	82	83	85	82	86	82	86	92	94	....
	Minimum	65	61	56	64	56	57	51	50	59	62	58	62	63	65	61	52	55	54	62	64	60	70	72	56	61	66	58	70	66	68	....
Marshall	Maximum	86	80	78	83	77	67	71	69	76	80	74	80	78	81	81	74	81	81	73	83	75	89	85	83	84	84	82	87	92	95	....
	Minimum	64	62	52	57	56	52	46	42	49	52	62	56	59	60	56	50	50	60	56	61	56	66	66	58	61	66	61	60	64	68	....
Warrensburg	Maximum	91	83	80	80	78	70	74	72	79	83	75	81	80	83	82	77	86	86	76	84	79	93	88	88	91	86	83	93	97	99	....
	Minimum	65	61	57	57	56	54	50	48	52	55	61	57	61	62	59	53	55	58	57	62	59	67	72	61	64	65	60	61	67	71	....
Warsaw	Maximum	90	80	85	89	66	69	73	75	78	80	72	80	78	82	80	75	83	85	75	86	82	92	86	87	88	86	76	90	94	95	....
	Minimum	62	67	54	60	62	56	50	51	49	52	60	53	55	60	60	52	51	59	62	62	62	61	74	61	62	65	60	57	62	67	....
Northwest Plateau.																																
Avalon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grant City	Maximum	82	76	80	80	72	68	70	62	77	74	77	80	82	82	74	75	83	75	72	65	70	90	82	79	85	82	81	88	93	95	....
	Minimum	60	55	56	56	55	52	47	53	49	52	59	58	61	69	52	50	50	58	51	56	52	62	64	59	60	63	57	61	65	66	....
Kansas City	Maximum	89	74	79	81	69	70	72	72	77	76	75	77	77	81	78	75	83	82	66	74	75	88	85	82	84	83	80	86	91	91	....
	Minimum	67	63	61	62	53	52	53	52	55	62	61	62	64	65	63	57	61	64	55	59	58	69	72	64	67	64	62	65	71	74	....
Kidder §§	Maximum	82	72	76	80	62	68	69	64	74	75	74	78	87	79	77	73	81	73	72	73	71	76	79	79	83	80	87	87	92	91	....
	Minimum	60	60	51	52	59	52	48	50	49	48	55	57	57	60	56	50	50	51	52	51	55	55	64	58	57	64	57	61	63	67	....
Lexington §§	Maximum	86	78	78	84	64	69	75	73	81	79	75	80	79	82	81	76	82	82	68	79	74	89	82	84	86	85	84	88	92	93	....
	Minimum	66	65	55	58	62	54	49	50	52	55	60	56	62	62	57	54	55	63	57	62	58	67	74	58	65	66	58	64	68	68	....
Maryville §§	Maximum	84	70	81	83	65	70	71	65	79	77	78	81	83	84	74	76	84	77	75	65	72	89	82	82	87	83	82	89	92	94	....
	Minimum	59	55	48	56	57	51	48	49	49	52	57	55	57	57	54	50	51	58	52	55	52	53	63	57	62	61	55	56	63	65	....
Oregon	Maximum	80	78	77	73	73	67	69	66	75	79	74	79	78	79	76	72	80	77	71	66	70	86	83	80	81	79	80	87	92	91	....
	Minimum	62	56	52	54	55	50	45	45	43	53	57	58	61	68	54	58	51	60	53	58	53	63	64	57	62	61	58	62	69	69	....
St. Joseph	Maximum	88	72	81	83	67	69	71	68	79	76	79	80	81	82	75	75	83	80	74	71	74	90	84	84	85	83	83	89	92	92	....
	Minimum	65	59	57	58	53	53	52	51	52	54	60	58	64	62	58	54	54	61	58	59	56	66	65	59	65	64	61	63	72	72	....
Trenton	Maximum	83	80	75	78	77	67	69	67	74	80	79	79	78	78	80	74	77	78	76	73	74	88	86	80	83	82	80	83	91	92	....
	Minimum	59	60	52	58	57	52	50	54	56	54	62	58	62	64	56	52	53	64	53	58	55	63	65	58	62	67	58	63	67	70	....

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record

§§ Instruments are read in the morning; the maximum temperature then read is charg

the preceding day, on which it almost always occurs.



NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
F

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

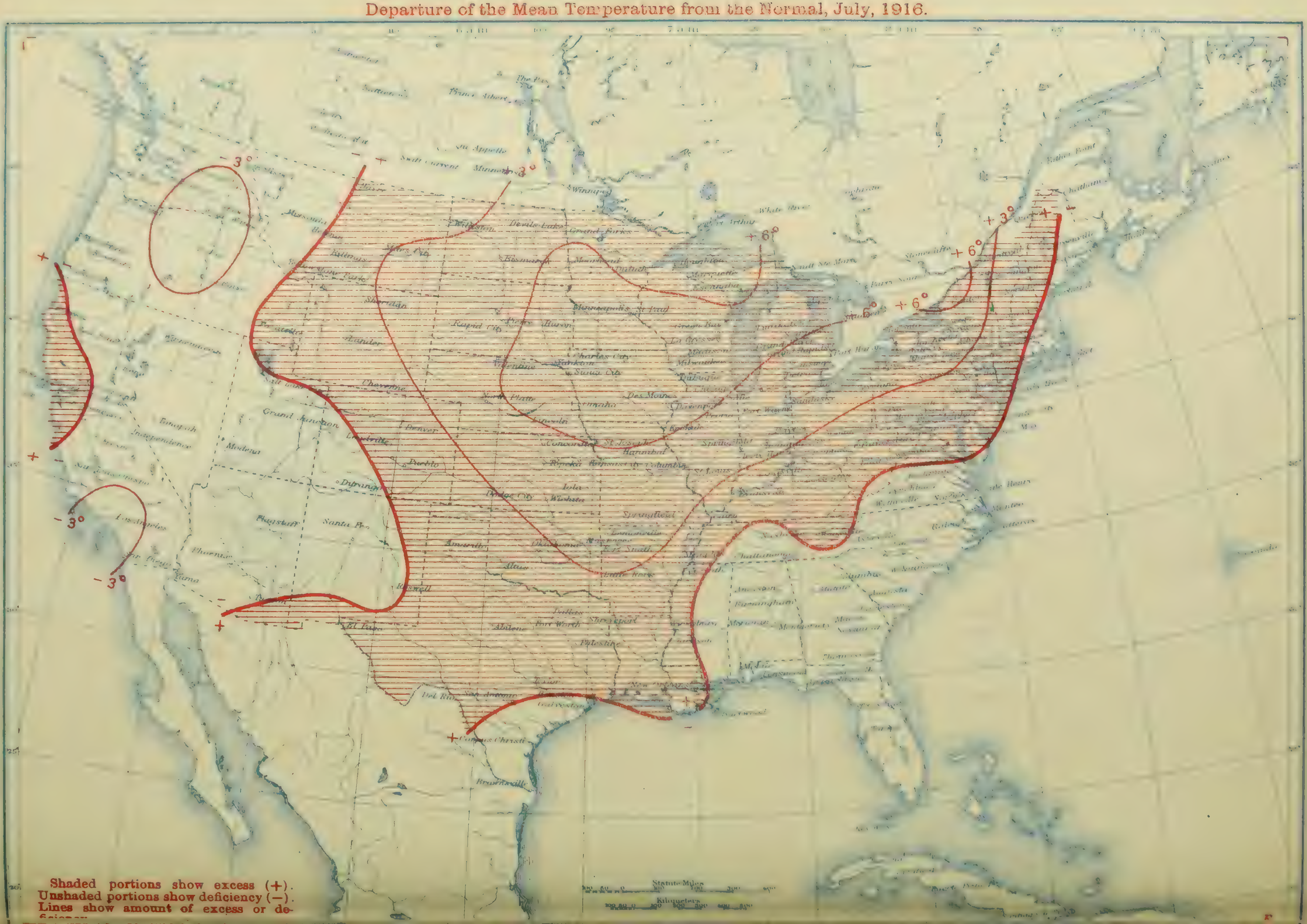
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JULY, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
AUGUST 21, 1916.

Departure of the Mean Temperature from the Normal, July, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XX. COLUMBIA, MO., JULY, 1916. No. 7.

GENERAL SUMMARY.

ly, 1916, in Missouri, was a month of continued hot, dry ner, with a high percentage of sunshine. It was, viewing tate as a whole, the driest July during the past 49 years; the second warmest in about 28 years, the period covered thentic temperature record in this State. The hot weather, ning during the latter part of June, was remarkable for tensity as well as duration, and so marked were its effects human and animal life that the death list was unusually , especially in the larger cities, as a direct result of the me heat. Moreover, the effects of the extreme heat to- r with deficient moisture was well nigh disastrous to vege- , and those farm crops that were not well on their way to rity before or by the last of June. Most of the corn crop aught in its most critical stage of growth—tasseling and g—and consequently suffered severe damage, estimated to out one-half, all of the highland corn being practically d, except for fodder. At the close of the month pastures vithered and died, and stockwater was becoming scarce ne localities. Gardens had failed, save where irrigated; pples were scaling and falling, while all small fruits were y a total failure. On the other hand, the weather was ble for the harvesting of wheat, oats, and hay, the two amed, owing to good rains in May and the first half of yielding more abundantly than usual.

TEMPERATURE.

e monthly mean temperature for the State as a whole, as nined from the records of 64 stations, was 81.6°. The departure from the normal for 51 stations having 10 or years' record was plus 4.6°. The present month is the est of its name, with one exception, 1901, in 28 years. It .1° and 1.4° warmer, respectively, than the same month 13 and 1914, but was not as warm as July, 1901, by 3.8°. xtreme heat began during the present summer near the of June, and continued, with hardly an appreciable ces- , during the entire month of July. The temperature ex- vas marked at all stations, the average for the State being y 5° a day. The Ozark plateau, however, owing to its r altitude, was not quite as warm as the other divisions. hottest days were the 15th to the 18th, and the 25th, 28th 31st, although the last ten days of the month experienced ratures of 100° or higher. The maximum temperature ll divisions was 90° or higher on 27 days; and 100° or r on 6 days. In July, 1901, the record was 28 and 16 respectively. The highest temperature recorded during resent month was 109°, at Steffenville on the 28th and At this station the temperature was 100° or higher on ys, and 90° or higher every day; at Warrensburg, in the western part of the state, 100° or higher was recorded on ys, and 90° or higher on 28 days; at Hollister, in the me south, 90° or higher occurred every day, and 100° or r on 17 days. The maximum 109° has been equaled times and exceeded three times during Julys of the past yseven years, the absolute maximum being 116° in 1901.

PRECIPITATION.

e average precipitation, 78 stations reporting, was 1.25 s. The departure from the normal for 67 stations having more years' record was minus 3.15 inches. It is the driest n 49 years, the next driest being 1886, with 1.34 inches. rought began to be general over the state following the ain of consequence of June 24th in the northeast plain, southeast lowlands, and Ozark plateau; and of the 27th in the southwest plain and northwest plateau. Only one station, Sikeston, Scott county, had an excess of precipation. The total rainfall at seven stations was inappreciable or nearly so; twenty stations received less than one-half inch, and thirtysix less than 1 inch; a total of about 2 inches fell at twelve stations, and 3 inches or more at nine stations. The widespread severity of the drought is probably more noticeably brought out by a study of the rainfall of each physiographic division than by counties. The prairie districts, known as the southwest and northeast plains, received only about 19 per cent of the normal rainfall; the northwest and Ozark plateaus 28 per cent, and the southeast lowlands 44 per cent.

The average number of days with 0.01 inch or more precipitation was 3, or about 6 below normal.

WIND.

The prevailing winds were from the southeast. Fresh to strong winds occurred on several days, the strongest being 62 miles an hour from the southwest, at St. Louis on the 19th. The average hourly velocity, however, was 1.3 below normal.

SUNSHINE AND CLOUDINESS.

The large amount of sunshine was a marked feature of the weather. The percentage of possible sunshine, based upon records of 6 regular stations, averaged 88 per cent or 17 per cent above normal.

MISCELLANEOUS PHENOMENA.

Hail—July 4, 19 and 28. Halos, solar—July 14 and 24. Thunderstorms — July 1, 3, 4, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 24, 25, 27, 28, 29, 30 and 31. Except on the 3d, 14th, 17th and 18th, the thunder was of very local character.

ERRATA FOR JUNE, 1916.

Clifton Hill, the monthly mean temperature should be 69.3. At Jackson the total precipition should be 12.96 inches.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean Relative Humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	29.96	79	......	401	89	3,460	4.7	27	se.	17
Hannibal	29.98	76	......	......	......	3,783	5.1	34	n.	3
Kansas City	29.94	67	46	412	91	5,483	7.4	41	n.	4
St. Joseph	29.94	78	48	401	88	3,662	4.9	42	nw.	4
St. Louis	29.96	69	51	391	86	5,702	7.7	62	sw.	19
Springfield	29.97	74	52	386	86	4,995	6.7	50	s.	4
Cairo, Ill	29.94	84	74	......	......	4,603	6.2	28	n.	31
Keokuk, Iowa	29.98	72	59	407	90	3,250	4.4	22	w.	17

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	79.3	+2.3	111	50	3.31	−0.98	......	0	7	....	....	....
1889	77.1	+0.1	107	46	3.75	−0.54	......	0	8	....	....	....
1890	79.6	+2.6	106	52	2.98	−1.31	......	0	5	....	....	....
1891	72.7	−4.3	103	4[illegible]	3.55	−0.74	......	0	8	....	....	....
1892	75.8	−1.2	101	45	4.99	+0.70	4.75	0	8	12	10	9
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	0	8	14	12	5
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	0	5	18	10	3
1895	74.4	−2.6	106	45	6.79	+2.50	6.52	0	10	10	12	9
1896	77.3	+0.3	108	48	5.87	+1.58	8.00	0	9	15	11	5
1897	78.7	+1.7	106	48	3.22	−1.07	4.05	0	6	19	9	3
1898	76.1	−0.9	104	42	5.58	+1.29	8.15	0	9	16	10	5
1899	76.0	−1.0	102	43	4.51	+0.22	4.48	0	9	15	11	5
1900	76.9	−0.1	102	46	4.11	−0.18	7.03	0	8	17	10	4
1901	85.4	+8.4	116	46	2.02	−2.27	3.78	0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0	8	17	11	3
1903	77.4	+0.4	102	51	3.22	−1.07	3.26	0	8	17	10	4
1904	74.2	−2.8	100	47	4.65	+0.36	4.15	0	10	15	11	5
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	0	12	12	10	9
1906	74.7	−2.3	100	48	3.53	−0.76	4.46	0	8	17	10	4
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	0	8	19	8	4
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	0	8	18	9	4
1909	76.7	−0.3	102	41	6.41	+2.12	10.7[illegible]	0	10	17	8	6
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	0	9	16	9	6
1911	78.0	+1.0	113	43	3.95	−0.34	4.29	0	8	16	9	6
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	0	7	18	9	4
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	0	7	18	9	4
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	0	7	17	9	5
1915	74.6	−2.4	102	42	6.05	+1.59	6.77	0	12	14	9	8
1916	81.6	+4.6	109	52	1.25	−3.15	2.55	0	3	25	5	1

Climatological data for July, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	....	....	....	....	....	....	....	1.04	−3.32	0.68	0	4	29	1	1	se.	C. Randecker.
Brunswick	Chariton	652	36	81.4	+4.4	99	25	62	10	30	1.59	−3.01	0.68	0	5	30	1	0	e.	Louis Benecke.
Clifton Hill	Randolph	731	....	....	....	104	25†	....	....	....	0.57	....	0.34	0	5	21	10	0	....	L. S. Harlan.
Columbia	Boone	784	26	81.4	+4.0	100	31	62	11	33	0.67	−2.98	0.53	0	5	21	9	1	se.	U. S. Weather Burea
Fayette	Howard	725	31	83.0	+5.8	104	28	63	10†	36	0.55	−3.35	0.55	0	1	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	24	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Dr. C. W. Knapp.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	0.37	−4.22	0.24	0	3	20	9	2	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	81.8	+4.4	101	25	62	11	33	0.05	−3.70	0.05	0	1	25	5	1	sw.	U. S. Weather Burea
Hermann	Gasconade	482	42	....	....	....	....	....	....	....	0.39	−3.63	0.22	0	3	25	4	2	e.	C. T. [illegible]
Jefferson City	Cole	628	30	82.4	+4.4	103	25	63	10	35	3.09	−0.64	1.15	0	7	31	0	0	e.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	....	....	....	....	....	....	0.57	....	0.24	0	3	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	80.5	+4.3	104	26	57	10	38	0.28	−3.25	0.18	0	2	22	9	0	e.	T. T. Farrell.
Macon	Macon	881	18	82.4	+5.3	103	28	58	10	33	0.12	−3.15	0.07	0	3	25	5	1	ne.	John A. Cook.
Mexico	Audrain	797	38	81.1	+3.9	103	31	58	10	35	3.75	−0.30	1.62	0	4	30	0	1	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	82.2	+4.7	102	31	62	10	30	0.83	−3.99	0.76	0	2	11	20	0	ne.	E. E. Stevens.
Palmyra	Marion	652	4	81.8	....	103	25	58	10	37	0.79	−2.89	0.68	0	2	....	....	....	....	W. B. Markell.
St. Catherine	Linn	914	3	80.4	....	100	31	59	10	32	4.02	....	1.68	0	5	23	8	0	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	82.8	+5.4	103	25	62	10	31	0.50	−3.04	0.50	0	1	25	6	0	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	84.2	+5.1	99	31	66	10	24	1.20	−2.23	0.81	0	4	24	7	0	ne.	U. S. Weather Burea
St. Louis (2)	......do	578	4	84.4	....	100	31	66	10	24	0.61	....	0.33	0	4	23	7	1	n.	St. Louis University
Steffenville	Lewis	576	23	84.8	+7.4	109	28†	56	10	42	0.49	−4.60	0.37	0	2	20	11	0	ne.	Frank Hall
Unionville	Putnam	1,072	23	81.0	+4.1	104	31	54	10	39	1.69	−2.69	1.25	0	3	26	4	1	s.	Geo. W. Davis.
Warrenton	Warren	865	25	83.1	+5.5	103	25	61	10	29	1.13	−2.88	0.44	0	5	18	12	1	s.	Prof. J. H. Frick.
Section means and extremes		....	....	82.1	+4.9	109	28†	54	10	42	1.13	−2.99	1.68	0	3	23	7	1	e.	
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	0.43	....	0.30	0	3	28	2	1	e.	D. L. Albert.
Cardwell	Dunklin	225	5	83.4	....	101	31	64	23	32	2.54	....	1.95	0	4	23	7	1	ne.	F. E. Tate.
Caruthersville	Pemiscott	220	25	84.4	+4.6	101	16	70	4†	28	1.78	−1.92	0.68	0	7	30	0	1	e.	H. L. Averill.
Doniphan	Ripley	440	11	82.4^{e}	+4.6	99	31	62	23	34	1.30	−4.70	0.70	0	6	27	3	1	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	25	82.1	+5.6	101	25	60	23	36	1.31	−2.46	0.57	0	3	13	13	5	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	82.2	+5.1	102	24	60	21†	40	1.67	−3.23	0.40	0	6	20	9	2	w.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	....	....	....	....	....	....	1.66	−2.69	1.00	0	8	27^{a}	1^{a}	2^{a}	ne.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	....	....	....	....	....	....	....	1.50	....	0.70	0	5	19	0	12	s.	George F. Ellis.
Poplar Bluff	Butler	333	12	81.8	+3.1	98	17†	64	23	29	1.72	−2.03	0.95	0	5	25	5	1	....	Albert E. Cox.
Sikeston	Scott	328	15	82.1	+3.7	100	17	64	5†	29	5.99	+1.66	2.15	0	4	23	8	0	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	82.2	+3.6	96	25	68	5	22	0.21	−3.24	0.13	0	3	16	13	2	n.	U. S. Weather Bureau
Section means and extremes		....	....	82.6	+4.3	102	24	60	21†	40	1.83	−2.33	2.15	0	5	23	6	2	ne.	
Ozark Plateau																				
Arlington	Phelps	695	14	....	....	....	....	....	....	....	0.30	−3.06	0.15	0	3	28	1	2	s.	G. V. Randolph.
Bagnell	Miller	594	....	....	....	....	....	....	....	....	1.05	−3.45	0.75	0	2	26	4	1	....	Mrs. Nellie V. House
Birchtree	Shannon	1,200	22	80.4^{a}	+4.2	100	31	60	23	33	0.68	−4.11	0.42	0	3	30	1	0	ne.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	80.5	+3.5	101	31	60	6†	37	3.61	−0.29	1.85	0	3	28	3	0	ne.	A. C. Fink.
Cassville	Barry	1,500	5	77.6	....	96	15†	55	11†	39	0.77	....	0.77	0	1	29	2	0	sw.	Mrs. Zuma Bloomer.
Crocker ††	Pulaski	1,300	5	82.5	....	103	15	60	24	38	1.06	....	0.40	0	3	29	2	0	w.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	80.2	+2.5	102	17	55	6	42	1.41	−2.96	0.80	0	5	27	3	1	se.	H. E. Dean.
Eldon	Miller	934	15	80.8	....	102	17†	59	5†	36	1.45	−2.79	1.00	0	4	14	17	0	e.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	R. C. Walton.
Gano ‡‡	Dent	1,250	12	81.6	+4.5	104	25	60	11†	42	0.34	−4.06	0.14	0	4	28	3	0	s.	A. C. Leach.
Goodland	Iron	1,000	11	78.5	+4.0	100	31	55	6	38	2.56	−2.37	1.10	0	8	15	13	3	s.	F. M. Adams.
Hollister	Taney	1,000	7	85.2	....	106	15†	58	4†	40	0.40	−4.33	0.40	0	1	31	0	0	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	79.3	+3.5	99	14†	59	23	32	1.76	−3.00	0.80	0	4	27	4	0	se.	R. F. Harmon.
Ironton	Iron	925	38	79.4	+3.8	102	31	54	6	38	1.57	−3.00	0.75	0	8	21	8	2	ne.	W. H. Delano.
Koshkonong	Oregon	911	15	83.0	+4.7	103	31	64	23	33	0.57	−3.75	0.28	0	3	17	13	1	ne.	R. M. Hitt.
Lebanon	Laclede	1,265	27	81.2	+4.3	103	27	57	10	37	1.35	−3.33	0.55	0	5	23	5	3	s.	Earl J. Breech.
Lockwood	Dade	1,088	21	81.5	+4.4	102	31	59	7	32	T.	−5.59	T.	0	0	29	2	0	ne.	C. S. Crow.
Mountain Grove	Wright	1,490	17	79.4	+3.3	101	31	58	10†	33	1.02	−3.49	0.51	0	3	22	8	1	se.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	J. R. White & Son.
Neosho	Newton	1,083	33	79.0	+1.3	98	16	56	11	37	1.73	−2.69	1.26	0	2	31	0	0	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	82.4	+5.0	103	30	62	6†	33	0.74	−3.40	0.29	0	3	25	6	0	nw.	Prof. Elmo G. Harris
Springfield	Greene	1,350	28	80.6	+4.2	96	31	63	6	29	0.74	−4.05	0.51	0	2	27	4	0	se.	U. S. Weather Bureau
Section means and extremes		....	....	80.7	+3.8	106	15†	54	6	42	1.16	−3.32	1.85	0	3	25	5	1	ne.	
Southwest Plain																				
Amoret	Bates	850	7	80.8	....	104	31	61	6†	36	1.55	....	1.55	0	1	23	7	1	se.	Darby Fruit Farm.
Clinton	Henry	800	29	82.9	....	103	15	52	6	37	0.67	−3.92	0.67	0	1	29	2	0	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	81.3	+3.9	106	16	60	11	35	2.09	−1.81	1.26	0	4	26	4	1	se.	A. J. Sharp.
Lamar	Barton	964	35	81.9	+3.8	103	31	60	11†	40	T.	−4.46	T.	0	0	31	0	0	se.	Dick B. Houston.
Lamonte	Pettis	863	27	84.6	....	102	16†	62	21†	37	T.	−4.70	T.	0	0	21^{c}	7^{c}	0^{c}	ne.	J. Ed. Hall.
Marshall	Saline	779	25	81.0	+4.2	102	25	60	10	40	0.50	−3.93	0.35	0	2	25	6	0	ne.	Prof. W. H. Black.
Nevada	Vernon	860	22	82.0	....	102	15†	60	11	38	0.46	−3.42	0.46	0	1	30	1	0	ne.	Mrs. C. Jewell.
Osceola	St. Clair	738	16	....	....	....	....	....	....	....	0.02	−4.48	0.02	0	1	29^{b}	0^{b}	0^{b}	....	W. E. Mathews.
Warrensburg	Johnson	883	37	84.2	+5.6	106	25†	62	6†	36	0.53	−3.71	0.53	0	1	26	5	0	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	81.0	+2.8	104	31	56	11	44	2.03	−2.82	1.85	0	2	23	8	0	se.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	....	....	....	....	....	....	T.	....	T.	0	0	26	5	0	....	John W. Cauthorn.
Section means and extremes		....	....	82.2	+4.1	106	25†	52	6	44	0.71	−3.69	1.85	0	1	27	4	0	se.	
Northwest Plateau																				
Avalon	Livingston	730	30	83.8	+6.4	104	25	62	10	34	0.95	−3.53	0.95	0	1	27	4	0	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	81.0	+5.8	102	25†	56	21	38	1.19	−3.51	0.65	0	3	19	7	5	sw.	M. H. Moulton.
Chillicothe	Livingston	....	1	....	....	....	....	....	....	....	0.83	−4.32	0.83	0	1	28	1	2	....	Hocey O. Dupy.
Conception	Nodaway	982	31	79.0	+3.4	94	12†	57	15	36	3.90	−0.14	1.72	0	5	21	10	0	se.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	....	....	....	....	....	....	....	2.93	−1.83	2.55	0	4	23	5	3	....	Robert R. Wynne, Jr
Grant City	Worth	1,130	23	81.4	+5.4	103	28	61	21	35	1.32	−3.70	0.97	0	2	27	3	1	se.	W. H. Campbell.
Kansas City	Jackson	963	27	83.3	+5.7	100	16	67	5	25	0.38	−4.46	0.36	0	2	26	5	0	se.	U. S. Weather Burea
Kidder	Caldwell	1,017	25	81.4	+4.9	104	28	60	7†	33	1.29	−2.96	0.60	0	5	27	4	0	sw.	J. F. Sharp.
Lexington	Lafayette	813	31	81.4	+1.9	101	16	60	11	34	0.06	−5.04	0.06	0	1	30	0	1	s.	J. W. Keithley.
Liberty	Clay	861	27	82.8^{a}	+5.5	102	25†	61	21	35	0.82	−3.92	0.32	0	3	27	4	0	ne.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	79.9	+3.8	100	25†	59	21	40	1.87	−3.69	0.75	0	4	24	6	1	s.	J. R. Brink.
Oregon	Holt	1,113	60	80.0	+4.6	97	16	59	21	29	3.43	−0.96	2.24	0	3	21	8	2	se.	Tom Curry.
St. Joseph	Buchanan	967	14	82.3	....	100	28	61	21	31	1.18	−2.80	0.55	0	3	22	7	2	se.	U. S. Weather Burea
Tarkio	Atchison	1,150	4	80.2	....	99	31	57	21	35	1.23	....	0.68	0	4	27	4	0	sw.	John F. Frazier.
Trenton	Grundy	812	21	81.4	+4.7	98	30	62	7†	27	1.01	−2.81	0.82	0	2	23	7	1	s.	W. H. Estes.
Section means and extremes		....	....	81.4	+5.0	104	25†	56	21	40	1.49	−3.26	2.55	0	3	25	5	1	se.	
State means and extremes		....	....	81.6	+4.6	....	....	....	....	....	1.25	−3.15	....	0	3	25	5	1	se.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete repor
used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific,
No. 1, of Dean, Anderson, of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for July, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
ille	Missouri				.20	.08													.68		.08											T.	1.04
wick ‖	Grand					.68												.33	.12		.31											.15	1.59
Hill	Chariton				.01											.15		.34	05	.02													0.57
bia***	Missouri	.01																.53	.02	T.									.06		T.	.05	0.67
e	do				.55																												0.55
	do																																
	Mississippi				.08														.05	.24							T						0.37
bal***	do			.05											T.					T.													0.05
nn ‖	Missouri		T.		.16													T.	T.	.22	.01												0.39
on City ‖	do		.30		T.													.52	.05	.89	1.15									.15	.03		3.09
ville	Chariton				.18												.24	.15															0.57
ana	Mississippi			.18															.10														0.28
	Chariton																	.04	.07	.01													0.12
e	Mississippi				1.62														.30	1.00	.83												3.75
id	Meramec			.76														.07	T.		T.					T.			T.			T.	0.83
a	Mississippi																			.11	.68												0.79
erne	Grand				1.68											.25	.08	1.50		.51													4.02
arles	Missouri			.50															T.														0.50
uis (1)***	Mississippi			.04									.34				.01		T.	.81						T.						T.	1.20
uis (2)	do		.07										.33						T.	03						.18						T.	0.61
ville	do	T.			.12															.37													0.49
ville	Grand					.24										.20	T.		1.25														1.69
nton ‖	Mississippi				.06											.25			.44		.37									T.	T.	.01	1.13
east Lowlands.																																	
irardeau	Mississippi				.30									T.															.10		03		0.43
ell	do						T.	T.				.31	1.95								T.	.08						T.	.20				2.54
ersville	do	T.					T.	T.				.01	.65			T.		T.		.12		.02				.10		.68	.20				1.78
eau	Black	T.			.10		.15	T.				.22									.70							.02				.11	1.30
n	Mississippi			.44									.57							.30													1.31
e Hill	do				.80		.04					.05					.26		40		.12												1.67
Madrid ‖	do		.04		.02								.04	.16	.20								1.00						.14		.06		1.66
a (near)	do			.30									20						.70	.05										.25			1.50
r Bluff	Black								.51				.02								.95	.14	T.								.10		1.72
on	Mississippi				.49			.27				.96		1.28				2.15	.03			.81											5.99
ill***	do			T.			.13	T.					.02						.06			T.								T.			0.21
Plateau.																																	
rton ‖	Gasconade															T.			.04	.11	.15												0.30
ll	Osage				.30	T.													.75		T.									T.	T.		1.05
tree	Black														.18			.42							.08								0.68
ar	Osage				1.85													1.71			.05												3.61
dle	White				.77																								T.				0.77
er	Gasconade																.37	.29		.40													1.06
	Neosho				.06												.08		.80	T.								.34	.13				1.41
	Osage	.32															.06	T.		1.00									.07				1.45
City	Black																																
	Meramec	T.		T.									T.					.06		T.		04							.10		.14		0.34
and	Black	.28													.35			.19	.12	.05	1.10				.17							.30	2.56
ter	White																.40																0.40
on	Gasconade	.50			.21														T.	.25	.80											T.	1.76
n	Mississippi				.15				.04				.04	12					.03	.76	T.	.36				T.					.08		1.57
nong	Black							T.													.28	T.			.23		.06						0.57
n	Osage			.15		.30													.55											.30		.05	1.35
wood	do				T.													T.											T.				T.
tain Grove ‖	White		.18			.51										T.			T.	T.		33											1.02
t Vernon	Neosho																																
o	do				1.26													.47										T.	T.				1.73
	Meramec				.20																T.	.25								.29			0.74
gfield***	White				.23											T.		T.		T.									.51				0.74
west Plain.																																	
t ‖	Osage																	T.		1.55									T.				1.55
on	do				.67																												0.67
sonville	do					.21									.03				1.26		.59									T.			2.09
r ‖	Neosho																		T.											T.			T.
nte	Missouri				T.													T.	T.	T.									T.		T.		T.
all	do				.35													T	.15	T.													0.50
la	Osage																	.46															0.46
la	do																													.02			0.02
nsburg	Missouri				.53													T.		T.												T.	0.53
aw	Osage					1.85													T.	.18	T.									T.			2.03
rly	Missouri					T.																								T.			T.
west Plateau.																																	
on	Grand				.95																												0.95
ny	do				.25									T.	.65				T.													.29	1.19
othe	do					.83																											0.82
ption	Missouri				.03									.94	1.07			.14	1.72														3.90
in	Grand				2.55									T.	.04		.30	T.	.04														2.93
City	do				T.								T.	.97				T.	T.	T.												.35	1.32
as City***	Missouri													.02				36															0.38
r	Grand					.36									.04		.60	.18	.11														1.29
gton	Missouri					.06																											0.06
ty	do				20									.30				T.														.32	0.82
ille	do					.64									75	.28			.20														1.87
n	do													1.04	2.24			T.	.15	T.													3.43
seph***	Missouri				.47									T.	.55				.16	T.													1.18
o	do				.15									.27	.68					.13													1.23
on	Grand				.82										.19		T.		T.													T.	1.01

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
of observation.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.

T. Trace, or less than 0.01 inch.

*** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight.

**Precipitation in the next following measurement.

‡ Separate dates of fall not recorded.

Daily temperatures for July, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	92	93	93	87	87	87	89	91	90	89	92	94	95	93	96	96	97	95	96	89	92	93	95	96	99	97	97	98	96	94	97
	Minimum	72	72	71	68	69	64	63	64	66	62	63	70	67	70	73	73	73	71	74	71	68	66	67	67	69	71	74	73	71	74	74
Columbia	Maximum	93	93	93	89	87	87	90	90	90	89	93	96	98	97	97	98	98	98	95	91	91	93	94	98	99	98	99	99	96	97	100
	Minimum	69	68	68	66	68	64	66	64	70	62	62	65	66	71	73	73	72	71	72	71	70	64	63	65	66	72	72	71	72	75	74
Fayette	Maximum	94	95	94	90	88	87	90	90	90	90	95	89	98	95	99	99	100	97	99	92	93	97	98	99	103	101	102	104	99	98	102
	Minimum	76	73	73	66	70	65	64	70	68	63	63	67	68	72	72	74	72	70	74	74	70	66	65	68	67	72	73	73	72	77	78
Hannibal	Maximum	94	95	94	89	88	90	92	91	86	89	93	95	97	94	94	99	98	97	96	90	91	94	95	99	101	99	98	101	98	98	98
	Minimum	72	70	69	67	69	64	63	63	67	63	62	65	68	73	70	71	71	72	71	72	70	65	65	68	68	71	74	71	75	75	75
Jefferson City §§	Maximum	97	96	95	90	88	87	91	91	91	91	95	96	100	99	98	100	97	99	100	90	90	94	95	98	103	98	98	99	97	97	100
	Minimum	72	69	72	65	68	64	67	68	70	63	64	67	67	70	71	72	71	69	70	70	72	66	64	76	68	71	71	72	72	74	76
Macon §§	Maximum	95	94	94	89	89	89	90	91	89	89	94	97	89	96	98	99	101	96	98	90	93	96	97	97	101	100	101	103	100	100	103
	Minimum	73	70	71	65	68	62	62	65	68	58	62	71	67	69	70	72	73	68	70	71	69	67	68	71	68	75	75	74	72	71	79
Mexico §§	Maximum	95	97	92	88	89	88	91	90	88	88	95	97	98	98	97	101	100	100	98	90	89	93	97	99	100	100	99	100	99	97	103
	Minimum	71	67	71	64	67	60	60	62	66	58	61	63	65	70	68	66	71	69	69	69	68	64	62	66	67	71	70	69	70	72	74
Oakfield	Maximum	93	95	96	87	85	86	89	90	87	86	90	94	96	94	95	98	97	95	97	92	90	91	95	97	99	100	99	99	98	99	102
	Minimum	73	70	67	65	66	64	67	68	67	62	68	69	72	74	73	75	74	69	72	70	70	68	68	72	69	73	75	75	73	78	77
St. Catharine	Maximum	95	93	93	85	85	85	87	90	87	86	92	95	95	88	96	99	96	91	96	85	89	93	91	91	97	96	96	98	94	95	100
	Minimum	73	69	69	67	77	64	62	62	67	59	60	64	68	71	71	71	71	68	72	70	65	66	66	67	66	71	73	74	72	74	75
St. Louis (1)	Maximum	94	96	94	86	86	87	89	91	87	88	92	92	95	92	94	97	96	94	94	92	90	90	94	97	97	98	97	98	96	95	99
	Minimum	78	78	72	69	70	69	70	76	68	66	73	72	72	77	77	80	79	76	70	74	75	74	75	79	78	78	81	79	80	82	79
Unionville §§	Maximum	96	98	95	84	88	89	92	95	91	92	96	98	96	94	98	99	94	96	95	91	92	94	95	96	102	101	96	98	99	100	104
	Minimum	68	73	70	61	65	60	58	64	63	54	57	64	70	68	70	72	70	66	70	66	58	60	66	70	71	74	73	71	72	71	73
Warrenton §§	Maximum	93	98	95	89	90	89	92	91	89	89	94	100	100	98	97	97	99	96	95	91	96	94	98	100	103	102	102	102	101	101	102
	Minimum	74	71	75	64	65	62	65	66	67	61	66	71	71	73	70	73	75	70	70	70	70	66	69	71	74	74	74	75	74	76	75
Southeast Lowlands.																																
Cardwell	Maximum	98	97	99	95	90	92	86	90	92	92	93	90	98	96	97	99	99	99	97	95	95	95	97	99	100	100	99	93	97	99	101
	Minimum	71	72	71	70	67	70	72	70	65	69	73	70	72	74	74	74	76	72	71	74	73	71	64	68	68	70	71	69	70	74	74
Caruthersville	Maximum	96	100	98	98	93	90	82	95	91	95	90	85	96	93	100	101	99	97	95	95	93	97	98	98	100	98	98	90	97	98	99
	Minimum	74	72	74	70	70	70	70	71	70	72	70	72	73	76	76	77	77	75	73	76	75	75	70	73	74	74	75	71	76	76	78
Doniphan	Maximum	95	96	95	89	88	89	84	90	....	91	93	91	96	95	96	98	98	95	94	89	92	91	93	96	98	97	98	94	97	97	99
	Minimum	68	68	69	65	67	67	70	68	....	....	....	....	....	71	70	71	73	86	76	70	73	79	62	62	68	71	70	79	70	75	78
Jackson	Maximum	95	99	98	89	88	90	90	91	88	89	97	97	100	95	98	98	99	97	96	98	99	92	96	97	101	99	99	97	97	97	100
	Minimum	71	70	71	68	62	64	69	66	65	67	68	70	70	70	71	71	72	72	71	69	72	67	60	65	65	68	69	70	69	71	71
Marble Hill	Maximum	94	95	95	90	88	92	99	91	90	90	93	90	98	93	98	98	96	97	92	90	100	100	100	102	99	100	100	100	100	99	100
	Minimum	72	73	70	65	63	65	64	67	68	68	67	70	73	71	72	71	70	70	70	70	60	65	64	69	69	60	72	72	70	71	72
Poplar Bluff §§	Maximum	95	96	96	95	92	88	91	81	91	91	90	93	88	95	95	97	98	98	96	95	90	92	92	94	97	97	95	97	95	96	96
	Minimum	71	71	70	66	65	68	70	66	67	68	69	72	70	72	72	72	74	73	73	68	71	71	64	70	69	69	71	70	70	72	72
Ozark Plateau.																																
Birchtree	Maximum	93	....	93	91	86	90	88	91	93	91	92	93	98	95	96	98	96	93	94	91	93	94	92	97	97	94	97	95	94	96	100
	Minimum	68	....	69	65	65	63	66	63	68	65	63	68	69	68	70	70	66	69	68	69	71	66	60	67	64	67	69	70	70	71	71
Cassville	Maximum	88	90	90	90	84	85	86	80	88	91	89	92	94	94	96	95	95	93	94	92	92	92	91	94	94	94	96	94	93	96	96
	Minimum	64	63	64	65	64	63	66	60	65	56	55	68	60	64	64	67	66	65	65	67	64	64	56	55	68	60	64	64	64	77	67
Eldon	Maximum	90	94	93	81	87	90	91	92	93	93	95	96	98	99	98	101	102	94	94	91	92	94	96	98	101	100	100	101	97	100	102
	Minimum	70	69	69	64	59	64	63	64	66	59	59	63	64	69	69	70	74	68	68	69	69	62	63	63	65	65	67	67	67	74	72
Fruit City	Maximum	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gano	Maximum	93	97	96	91	90	89	92	91	91	88	94	100	100	101	99	100	100	99	98	97	94	95	102	90	104	102	100	100	99	101	102
	Minimum	70	66	67	63	68	64	65	67	61	63	60	65	69	71	68	69	71	68	70	69	69	61	60	62	65	67	68	69	67	71	74
Hollister	Maximum	96	96	98	96	96	92	90	94	96	96	98	100	102	104	106	104	100	102	100	102	100	100	102	98	104	102	102	98	100	98	106
	Minimum	70	76	74	58	72	64	72	70	68	64	58	64	72	80	78	80	78	82	70	68	68	70	66	68	62	68	72	76	78	74	82
Ironton §§	Maximum	96	95	96	90	88	90	90	93	91	90	95	92	96	97	98	98	96	93	93	93	91	91	93	95	98	98	99	99	99	99	102
	Minimum	66	65	64	63	57	54	60	60	61	61	61	72	66	67	64	66	67	67	67	69	70	61	56	61	60	63	65	68	65	69	74
Lebanon §§	Maximum	98	101	99	101	86	86	88	90	91	90	91	95	98	99	98	99	101	98	98	93	92	92	97	101	102	98	103	99	97	99	101
	Minimum	68	68	70	68	65	59	62	64	58	57	59	61	65	68	71	71	72	68	70	70	67	62	62	65	65	65	70	70	68	68	72
Mountain Grove §§	Maximum	92	93	92	91	84	87	87	88	89	88	91	95	96	97	95	99	96	95	93	91	91	92	91	94	96	95	96	96	94	93	101
	Minimum	67	67	66	66	61	59	65	64	64	58	59	62	68	68	71	70	72	67	68	68	69	63	58	62	63	68	68	69	70	70	73
Neosho	Maximum	90	91	92	92	87	87	88	89	89	91	93	94	96	97	97	98	98	97	96	96	92	93	95	97	97	97	96	98	94	96	96
	Minimum	65	65	66	67	67	57	64	62	60	60	56	60	59	66	66	68	68	69	69	70	65	65	60	58	62	66	67	65	65	66	70
Rolla §§	Maximum	95	96	97	93	89	90	93	93	93	92	95	97	101	100	97	100	97	95	96	92	93	96	96	100	100	100	100	99	98	103	102
	Minimum	72	69	69	65	65	62	64	65	67	62	62	65	69	70	69	69	71	70	70	70	70	64	63	83	71	71	70	70	69	72	74
Springfield	Maximum	90	91	91	91	83	84	85	86	87	87	89	94	94	95	91	95	94	94	92	88	89	90	92	94	94	93	94	94	90	94	96
	Minimum	70	70	70	64	68	63	67	69	68	67	68	71	69	72	74	74	73	71	74	73	70	71	68	69	72	72	72	65	72	76	76
Southwest Plain.																																
Amoret	Maximum	91	94	92	95	88	87	90	90	95	93	94	98	100	95	102	102	100	96	96	89	91	94	96	97	97	97	97	99	96	101	104
	Minimum	67	67	67	67	63	61	62	65	64	65	61	62	67	67	68	70	70	68	67	70	65	66	67	61	66	61	65	71	69	70	74
Clinton	Maximum	95	95	97	94	89	90	90	91	94	94	96	98	100	102	103	101	100	101	99	95	97	97	98	99	100	100	101	102	97	100	102
	Minimum	80	81	76	68	66	52	62	65	68	65	60	68	66	70	73	72	73	69	72	73	67	68	63	63	64	63	71	71	68	71	74
Harrisonville §§	Maximum	93	94	95	95	89	89	90	91	92	93	95	97	100	94	100	102	99	94	96	88	91	93	94	95	97	96	98	98	95	99	100
	Minimum	68	68	69	70	66	63	64	64	67	65	60	62	67	69	70	70	74	70	71	71	66	67	63	63	66	70	68	72	70	70	77
Lamar §§	Maximum	93	93	94	95	89	89	91	91	92	93	95	98	99	100	102	101	102	98	99	92	94	98	98	100	101	102	101	101	98	100	103
	Minimum	68	69	70	70	68	63	65	67	67	65	60	60	65	66	68	68	62	69	72	74	67	68	62	62	65	69	71	72	69	70	74
Lamonte	Maximum	95	94	93	92	94	95	93	92	91	....	....	....	94	97	97	102	101	102	100	94	93	96	100	102	101	99	102	100	96	102	102
	Minimum	86	72	75	68	72	68	67	64	73	....	....	....	73	75	79	85	87	86	78	72	62	62	65	70	68	66	72	69	70	65	67
Marshall	Maximum	95	95	95	91	87	88	90	91	91	90	94	96	98	94	99	101	99	99	99	91	93	95	97	98	102	100	99	101	97	97	101
	Minimum	70	69	69	65	64	62	63	68	69	60	61	62	64	68	70	72	71	68	70	71	53	66	62	62	65	68	69	70	68	71	72
Warrensburg	Maximum	98	98	98	95	89	88	94	92	94	95	97	101	103	100	104	103	102	104	101	93	96	100	102	103	106	105	104	106	103	101	101
	Minimum	71	72	74	70	65	62	64	65	64	65	62	67	68	71	72	73	75	68	74	71	63	66	67	68	70	74	73	73	72	69	75
Warsaw	Maximum	96	97	98	94	85	86	90	90	91	91	95	97	99	97	101	102	102	101	100	94	95	97	99	102	103	102	102	103	100	102	104
	Minimum	67	67	68	66	64	57	60	62	63	58	56	59	61	66	69	70	68	70	70	70	64	64	59	58	61	64	66	67	66	69	73
Northwest Plateau.																																
Avalon	Maximum	97	94	97	88	88	89	91	93	92	92	96	99	100	92	100	100	100	97	100	91	98	96	100	100	104	102	101	103	99	100	102
	Minimum	73	75	78	74	68	65	63	65	72	62	65	68	70	74	70	75	75	69	72	70	74	70	65	70	70	72	74	75	75	74	77
Grant City	Maximum	97	97	97	84	89	86	92	93	95	95	99	98	85	82	98	96	94	86	89	88	93	98	100	100	102	102	102	103	101	102	100
	Minimum	69	70	71	67	65	65	72	65	67	65	65	70	67	65	71	71	73	69	69	63	61	63	67	67	67	68	71	73	71	71	71
Kansas City	Maximum	92	92	93	90	86	85	87	89	90	88	91	94	96	89	98	100	95	92	92	87	90	93	95	96	98	97	96	99	94	95	99
	Minimum	75	75	77	70	67	69	67	70	73	71	73	76	76	73	75	81	70	71	76	70	69	71	76	74	78	77	77	79	74	79	79
Kidder §§	Maximum	95	91	94	88	87	86	90	90	91	90	97	98	98	91	102	101	100	89	90	88	90	90	96	100	102	103	102	104	99	103	101
	Minimum	70	70	71	68	65	63	60	61	64	63	64	66	68	69	69	71	72	68	71	67	60	61	67	69	71	72	72	73	71	72	74
Lexington §§	Maximum	95	93	94	93	90	89	90	92	92	92	94	96	98	90	99	101	98	96	97	91	92	95	96	96	100	98	97	99	96	97	100
	Minimum	71	72	70	68	65	62	61	61	66	64	60	64	67	71	71	72	72	69	71	70	63	64	65	67	66	70	71	72	70	70	74
Maryville §§	Maximum	96	96	95	85	70	88	92	93	95	95	98	97	97	83	98	98	89	88	87	88	92	95	97	98	100	99	97	100	97	100	99
	Minimum	62	65	70	69	63	62	60	61	61	65	66	70	68	66	67	69	73	69	69	62	59	62	68	66	60	69	69	70	69	70	73
Oregon	Maximum	93	92	93	90	91	88	89	91	93	91	94	94	96	86	96	97	88	87	84	83	87	92	92	92	95	96	95	96	94	95	96
	Minimum	69	70	71	69	63	65	61	65	68	67	67	71	67	65	72	73	73	68	71	64	59	65	68	68	67	71	70	72	70	72	74
St. Joseph	Maximum	94	93	94	88	90	88	91	93	94	93	95	96	96	91	98	98	95	91	86	87	91	95	97	97	99	99	97	100	96	98	98
	Minimum	70	71	73	67	67	67	63	64	67	70	69	72	75	68	75	75	75	72	75	67	61	64	73	69	68	72	75	76	71	73	77
Trenton	Maximum	93	91	94	94	87	85	87	89	89	87	91	95	94	90	95	94	96	93	93	88	88	92	96	94	96	97	96	97	95	98	96
	Minimum	73	73	74	70	67	66	62	64	69	64	64	69	70	70	72	73	74	72	73	68	62	65	70	70	70	73	75	75	73	74	76

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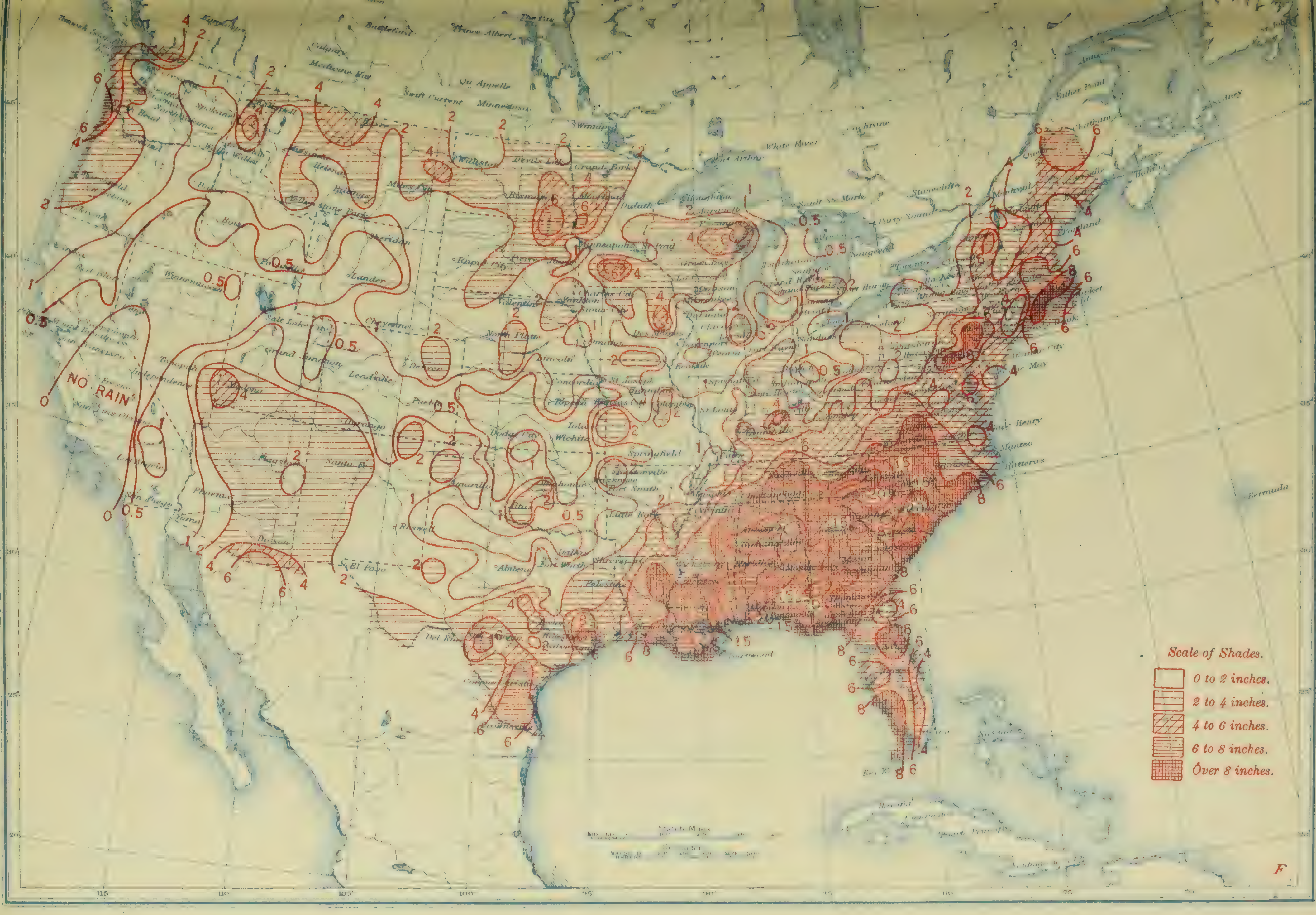
a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
F
Battleford
Prince Albert
Calgary
Medicine Hat
Qu Appelle
Swift Current
Minnedosa
Winnipeg
White River
Port Arthur
Cochrane
Chatham
Father Point
Sydney
Halifax
Quebec
Montreal
Stonecliffe
Sault Ste Marie
Parry Sound
Toronto
Saugeen
Port Huron
Spokane
Walla Walla
Helena
Havre
Billings
Miles City
Williston
Bismarck
Devils Lake
Grand Forks
Moorhead
Duluth
Houghton
Marquette
Escanaba
Green Bay
Minneapolis
La Crosse
Madison
Milwaukee
Dubuque
Chicago
Detroit
Cleveland
Buffalo
Albany
Portland
Nantucket
Block Island
Boise
Pocatello
Winnemucca
Yellowstone Park
Sheridan
Lander
Rapid City
Pierre
Huron
Valentine
Yankton
Sioux City
Charles City
Des Moines
Davenport
Peoria
Keokuk
Springfield
Indianapolis
Cincinnati
Columbus
Pittsburg
Washington
Atlantic City
Cape May
Cape Henry
Manteo
Hatteras
Salt Lake City
Cheyenne
North Platte
Omaha
Lincoln
Grand Junction
Denver
Leadville
Pueblo
Concordia
Topeka
Kansas City
St Joseph
Hannibal
Columbia
St Louis
Tonopah
Independence
San Francisco
Fresno
San Luis Obispo
Los Angeles
San Diego
Yuma
Phoenix
Flagstaff
Santa Fe
Durango
Dodge City
Wichita
Iola
Amarillo
Oklahoma
Fort Smith
Little Rock
Roswell
El Paso
Abilene
Fort Worth
Palestine
Shreveport
Del Rio
Corpus Christi
Brownsville
Memphis
Chattanooga
Knoxville
Birmingham
Montgomery
Atlanta
Augusta
Savannah
Jacksonville
Key West
Port Eads
Bermuda
Nassau
Havana
Statute Miles
115
110
105
100
95
90
85
80
75
70
45
40
35
30
25
20
NO RAIN
0
0.5
1
2
4
6
8
15
20

Stack

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

SEP 26 1916

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

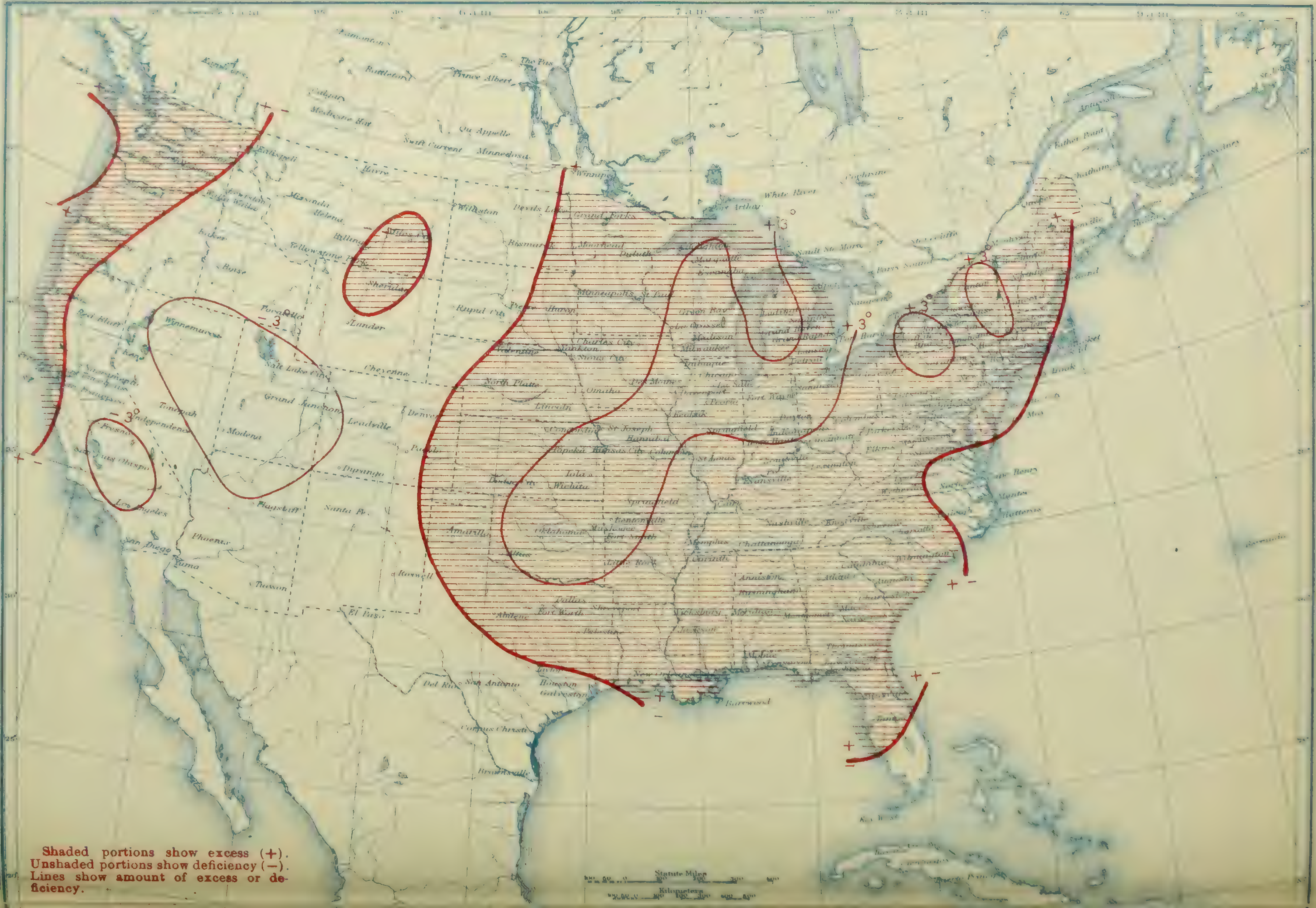
AUGUST, 1916

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
SEPTEMBER 18, 1916.

Departure of the Mean Temperature from the Normal, August, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XX. COLUMBIA, MO., AUGUST, 1916. No. 8.

GENERAL SUMMARY.

he weather of August, 1916, was largely a continuation of t and drought, that began during the latter part of June prevailed during July. Good rains about the middle of month over the northern half of the state broke the drought hat section, or at least the larger part of it, but, save a few sional showers, there was very little relief from either heat lrought in the southern divisions. During the last ten days he month, however, there were a few days when normal or w normal temperatures prevailed.

n the 13th, 14th, and 15th rains were excessive in some of northeastern counties, and especially from about Pike to ion. Many of the creeks overflowed, and bridges were hed away. The loss to railroads, running out of Hannibal, unted to probably $100,000. During the night of the 12th understorm and heavy rain swept over St. Louis, flooding streets and sewers, causing considerable damage to property ral houses were struck by lightning, but no lives were lost. e rains came somewhat too late to benefit, to any apprec- e extent, growing crops. In the southern sections, partic- ily the southwestern plain and most of the Ozark Plateau, re there has been but little rain in ten weeks, conditions serious. The hot sun and dry weather were unfavorable apples, which continued to drop in all sections. Potatoes were cut short. The rains, however, facilitated fall plow- north of the Missouri River.

TEMPERATURE.

he monthly mean for the State, as determined from the rds of 65 stations, was 79.2°. The departure from the nor- for 50 stations having 10 or more years' record was plus . As compared with the same month in other years, back bout 1888, the heat of the present August has been exceed- but three times, namely, in 1900, 1909, and 1913. The perature was above normal during almost the entire month, several days in the northern half of the State during the er part of the month. As a whole the heat was a little more ssive in the southern divisions than the northern, owing to fact there was more cloudiness and rain in the latter. Tem- atures reached 90° or higher on 17 or 18 days in the north- divisions, and on 24 days in southern divisions; and they e 100° or higher on from 3 to 11 days, the latter number resenting the southwestern plain. At some of the southern ions, Hollister for instance, 100° or higher occurred every , except the 6th, from the 1st to the 15th. The highest perature recorded was 107° on the 4th, which has been aled once and exceeded ten times during the same month in ut 28 years, the absolute maximum being 111° in August, 4.

PRECIPITATION.

e average precipitation, 74 stations reporting, was 4.05 inches. The rture from the normal for 64 stations having 10 or more years' rec- vas plus 0.49 inches. The monthly precipitation was deficient in all sions except the northeast plain. In this division the excess was enough to offset the deficiencies in the remainder of the state, h were quite large, ranging from a little more than one-half inch in southeastern lowlands to 1.27 inches in the southwest plain. From t the 11th to the 15th general and heavy rains fell over the northern of the state, especially over the northeast plains; but the drought, t for occasional showers, was unbroken in the south, particularly Ozark plateau and southwestern plain. In a few of the northeast coun- the rainfall during the period from about the 13th to the 15th was kedly excessive, and in a few instances damaging. At Louisiana, Pike county, 6.48 inches fell on the 15th, and 9.74 inches on three days, the 13th, 14th and 15th; and from the 8th to the 15th, there was a total of 14.75 inches. At Hannibal, Marion county, 3.90 inches fell in 12 hours and 56 minutes, 1.76 inches falling in 1 hour and 17 minutes, on the 15th. On the other hand, Clinton, Harrisonville and Bolivar, all in the southwestern plain, received only .30 inch, .75 inch, and 1.00 inch, respectively, during the entire month.

The average number of days with 0.01 inch or more precipitaton was 7.

EVAPORATION.

The total evaporation from standard free exposure at Columbia, Mo., was 6.54 inches. The average hourly wind velocity at the surface of the pan was 1.1 miles. The total precipitation was 2.09 inches. (7 a.m. July 31 to 7 a.m. August 31.)

WIND.

The prevailing winds were from the south. The average hourly velocity, based upon the records of 8 regular stations, was slightly greater than the normal, but there were no severe storms. A maximum of 44 miles at St. Louis on the 20th was the highest reported.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the state, based upon the records of Kansas City, Columbia and St. Louis, was 315, or about 74 per cent of the possible, and about 3 per cent above normal.

MISCELLANEOUS PHENOMENA.

Auroras: At St. Joseph, and Keokuk, Iowa, on the 26th.
Hail: August 22.
Halos, solar: August 19, 30 and 31.
Thunderstorms: August 2, 3, 7, 8, 9, 11, 13, 14, 15, 20, 22 and 26.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean Relative Humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	29.99	83	......	346	82	4,592	6.2	22	n.	11
Hannibal	30.00	82	......	......	......	5,225	7.0	35	nw.	11
Kansas City	29.96	73	53	332	78	7,123	9.6	42	w.	2
St. Joseph	29.96	80	58	292	69	4,718	6.3	34	nw.	10
St. Louis	30.00	81	62	307	72	7,216	9.6	44	se.	20
Springfield	30.00	78	56	303	72	5,950	8.0	31	ne.	9
Cairo, Ill	30.00	89	71	......	......	4,397	5.9	30	sw.	22
Keokuk, Iowa	30.01	82	64	313	73	4,060	5.7	37	sw.	7

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature. Mean.	Departure.	Highest.	Lowest.	Precipitation. Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of Days. With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	74.0	−1.6	110	48	7.25	+3.80	......	0	11	....	....	....
1889	73.5	−2.1	101	52	1.96	−1.49	......	0	14	....	....	..
1890	73.3	−2.3	104	49	4.84	+1.39	......	0	9	....	....	....
1891	73.2	−2.4	198	38	5.34	+1.89	.....	0	8	....	....	....
1892	74.3	−1.3	100	40	2.42	−1.03	4.50	0	6	17	8	6
1893	72.8	−2.8	100	40	2.20	−1.25	5.60	0	4	18	10	3
1894	77.0	+1.4	111	39	1.58	−1.87	3.07	0	5	14	16	1
1895	75.3	−0.3	104	48	4.23	+0.78	3.50	0	8	15	11	5
1896	76.6	+1.0	108	41	3.25	−0.20	4.80	0	6	17	10	4
1897	74.1	−1.5	108	41	2.39	−1.06	6.88	0	6	19	9	3
1898	75.8	+0.2	103	44	3.03	−0.42	5.00	0	5	17	10	4
1899	78.8	+3.2	107	49	3.35	−0.10	4.75	0	7	18	10	3
1900	80.3	+4.7	105	52	3.51	+0.06	4.28	0	6	19	9	3
1901	78.4	+2.8	109	47	1.88	−1.57	2.77	0	5	19	9	3
1902	75.0	−0.6	103	47	6.16	+2.71	4.33	0	10	14	11	6
1903	74.4	−1.2	102	43	5.40	+1.95	7.84	0	10	16	11	4
1904	73.7	−1.9	100	43	5.46	+2.01	6.40	0	8	16	10	5
1905	76.4	+0.8	102	48	4.69	+1.24	4.43	0	8	19	7	5
1906	76.6	+1.0	101	40	4.72	+1.27	3.94	0	11	14	10	7
1907	77.3	+1.7	109	47	3.71	+0.26	3.55	0	9	17	8	6
1908	76.4	+0.8	102	46	3.87	+0.42	6.30	0	8	17	9	5
1909	79.5	+3.9	110	40	0.55	−2.90	4.30	0	2	24	6	1
1910	74.7	−0.9	103	40	2.77	−0.68	4.21	0	6	15	9	7
1911	75.4	−0.2	109	41	4.20	+0.55	5.17	0	7	15	8	8
1912	76.2	+0.6	104	41	4.19	+0.74	2.62	0	9	17	8	6
1913	82.8	+6.9	110	41	1.06	2.51	3.51	0	3	22	7	2
1914	78.0	+1.8	106	49	4.25	+0.69	2.50	0	9	15	9	7
1915	69.8	−6.5	98	37	7.86	+4.15	8.20	0	12	12	9	10
1916	79.2	+2.9	107	41	4.05	+0.49	6.48	0	7	19	7	5

Climatological data for August, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain																				
Boonville	Cooper	600	39	.....	......	.....	.....	.....	.....	....	3.65	+0.25	2.21	0	8	18	3	10	se.	C. Randecker.
Brunswick	Chariton	652	36	78.6	+3.1	100	12	48	28	35	2.03	−1.99	0.90	0	6	20	3	8	e.	Louis Benecke.
Clifton Hill	Randolph	731	....	79.8^{a}	....	103	3	44	28	37	2.20	....	0.72	0	8	16	12	3	......	L. S. Harlan.
Columbia	Boone	784	26	79.0	+4.3	100	12	46	28	31	2.04	−1.00	1.53	0	7	19	7	5	se.	U. S. Weather Bureau.
Fayette	Howard	725	31	79.9	+3.9	102	3	48	28	34	3.70	+0.77	3.20	0	5	....	....	....	......	Prof. T. B. Smith.
Fulton	Callaway	818	24	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	Dr. C. W. Knapp.
Gorin	Scotland	700	27	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	J. W. Putnam.
Hannibal	Marion	534	23	77.7	+2.7	99	7	48	28	28	9.15	+5.77	3.90	0	8	16	10	5	sw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	.....	......	.....	.....	.....	.....	....	5.33	+2.31	2.00	0	11	15	5	11	ne.	C. T. Mansling.
Jefferson City	Cole	628	30	79.0	+2.4	100	7†	48	28	34	4.66	+1.99	1.17	0	9	24	3	4	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	.....	......	.....	.....	.....	.....	....	1.56	....	0.82	0	6	....	....	....	......	J. T. Dewey, M. D.
Louisiana	Pike	500	38	78.3	+3.4	104	4†	44	28	33	14.86	+11.95	6.48	0	8	17	11	3	nw.	T. T. Farrell.
Macon	Macon	881	18	77.4	+0.8	100	4†	48	28	32	6.75	+3.97	2.22	0	10	18	6	7	sw.	John A. Cook.
Mexico	Audrain	797	38	78.0	+1.9	101	7	45	28	34	7.73	+5.00	2.60	0	9	21	0	10	s.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	79.1	+2.2	102	4†	48	28	33	6.06	+2.82	2.65	0	7	10	17	4	s.	E. E. Stemmes.
Palmyra	Marion	652	4	77.2	....	102	4†	47	28	32	8.91	+5.71	2.05	0	8	20	8	3	sw.	W. B. Markell.
St. Catherine	Linn	914	3	76.5	....	99	5	47	28	31	6.27	....	3.15	0	8	16	13	2	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	78.8	+2.4	100	4	50	28	30	11.74	+8.79	4.45	0	8	14	9	8	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	78.7	+1.5	96	4	55	28	24	10.69	+8.03	3.88	0	10	15	13	3	s.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	78.8	....	97	20	53	28	25	13.65	....	4.17	0	10	18	9	4	s.	St. Louis University.
Steffenville	Lewis	576	23	79.8	+3.0	107	4	49	28	39	7.88	+4.41	2.40	0	10	16	13	2	sw.	Frank Hall.
Unionville	Putnam	1,072	23	75.4	−0.3	98	5	46	28	40	8.50	+4.48	5.05	0	5	18	5	8	s.	Geo. W. Davis.
Warrenton	Warren	865	25	79.5	+2.3	103	3	50	28	34	2.95	+0.21	0.80	0	7	10	12	9	s.	Prof. J. H. Frick.
Section means and extremes		....	....	78.4	+2.4	107	4	44	28	40	6.68	+3.73	6.48	0	8	17	8	6	s.	
Southeast Lowlands																				
Cape Girardeau	Cape Girardeau	346	10	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	D. L. Albert.
Cardwell	Dunklin	225	5	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	F. E. Tate.
Caruthersville	Pemiscott	220	25	82.7	+3.6	100	11†	58	30	32	2.74	−0.26	0.95	0	6	24	6	1	e.	H. E. Averill.
Doniphan	Ripley	440	11	81.4	+3.8	100	14†	54	28	38	1.11	−2.64	1.00	0	3	21	6	4	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	25	79.8	+4.0	103	18	49	29	42	2.45	−0.61	0.80	0	8	14	9	8	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	79.6	+2.7	102	11	52	29†	40	4.06	+1.11	2.10	0	7	16	11	4	w.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	.....	......	.....	.....	.....	.....	....	1.09	−2.38	0.50	0	7	15	5	11	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	.....	......	.....	.....	.....	.....	....	1.25	....	0.70	0	2	18	0	13	s.	George F. Ellis.
Poplar Bluff	Butler	333	12	79.9	+1.7	100	12	53	29†	36	3.00	−0.17	2.13	0	6	15	8	8	......	Miss Belle Kinne.
Sikeston	Scott	328	15	80.7	+3.1	100	20	54	29†	36	4.28	+0.91	2.22	0	5	19	9	3	s.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	79.4	+2.4	96	20	59	29	22	2.28	−0.65	0.83	0	6	10	15	6	s.	U. S. Weather Bureau.
Section means and extremes		....	....	80.5	+3.0	103	18	49	29	42	2.47	−0.59	2.22	0	6	17	8	6	s.	
Ozark Plateau																				
Arlington	Phelps	695	14	.....	......	.....	.....	.....	.....	....	2.65	−1.16	0.82	0	8	22	2	7	s.	G. V. Randolph.
Bagnell	Miller	594	....	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	78.6^{c}	+2.5	99	1	51	29	35	2.33	−1.64	1.40	0	3	26	3	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	81.5	+4.3	106	12	48	28	42	1.00	−2.66	0.55	0	4	21	9	1	se.	A. C. Fink.
Cassville	Barry	1,500	5	79.4	....	99	28	48	24	42	1.09	....	1.00	0	2	20	6	5	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	81.8^{a}	....	103	23	45	28	45	1.50	....	1.30	0	3	26^{a}	2^{a}	2^{a}	se.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	80.0	+2.0	102	12†	50	24	44	3.94	+0.11	1.33	0	6	20	7	4	e.	H. E. Dean.
Eldon	Miller	934	15	78.8	....	100	21	41	28	37	2.64	−1.31	0.90	0	9	9	20	2	se.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	R. C. Walton.
Gano ‡‡	Dent	1,250	12	79.0	+2.4	102	20	49	28	41	3.23	−0.40	1.00	0	9	22	7	2	s.	A. C. Leach.
Goodland	Iron	1,000	11	76.8	+2.4	97	20	48	30	42	5.64	+2.66	1.46	0	5	20	6	5	s.	F. M. Adams.
Hollister	Taney	1,000	7	84.6	....	106	13	50	24	44	1.40	−2.85	0.60	0	5	24	0	7	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	80.0^{e}	+4.8	98	12†	51	24†	36	1.78	−1.76	0.62	0	5	25^{a}	4^{a}	1^{a}	s.	R. F. Harmon.
Ironton	Iron	925	38	77.4	+3.1	97	19†	47	29	41	4.11	+0.68	1.05	0	8	7	15	9	n.	W. H. Delano.
Koshkonong	Oregon	911	15	81.2	+2.7	100	12†	55	29	38	3.31	−0.42	2.23	0	4	19	9	3	s.	R. M. Hitt.
Lebanon	Laclede	1,265	27	80.3	+4.0	104	7	45	28	46	1.59	−1.61	0.85	0	6	21	2	8	s.	Leonard E. Dickerson.
Lockwood	Dade	1,088	21	81.8	+4.9	101	12†	50	28	35	2.66	−1.41	1.81	0	3	25	5	1	ne.	C. S. Crow.
Mountain Grove	Wright	1,490	17	80.4	+1.9	101	12†	51	28	41	1.31	−2.55	0.62	0	7	19	8	4	s.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	J. R. White & Son.
Neosho	Newton	1,083	33	80.8	+3.8	100	13†	51	29	41	33.5	−0.73	1.57	0	4	28	1	2	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	79.0	+3.4	101	12	48	28	38	5.04	+1.32	2.39	0	8	21	7	3	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	78.8	+4.0	95	12	52	28	28	4.45	+0.14	2.02	0	7	20	10	1	s.	U. S. Weather Bureau.
Section means and extremes		....	....	80.0	+3.5	106	12†	41	28	46	2.79	−0.80	2.39	0	6	21	6	4	s.	
Southwest Plain																				
Amoret	Bates	850	7	81.0	....	104	20	45	28	50	2.85	....	1.53	0	5	19	11	1	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	82.3	+4.7	104	19	51	28	36	2.35	−1.65	1.62	0	5	13	13	5	se.	W. G. Bigelow.
Clinton	Henry	800	29	81.7	....	103	7†	49	28	41	0.30	−3.05	0.20	0	2	23	7	1	se.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	80.4	+5.1	104	12	45	28†	53	0.75	−3.28	0.25	0	5	11	6	14	sw.	A. J. Sharp.
Lamar	Barton	964	35	81.7	+4.5	105	12	51	28†	39	3.58	−0.55	1.98	0	7	28	2	1	sw.	Dick B. Houston.
Lamonte	Pettis	863	27	79.8	....	102	2	43	29	43	4.54	+1.06	2.25	0	6	15	14	2	sw.	J. Ed. Hall.
Marshall	Saline	779	25	78.2	+2.2	102	3	48	28	38	4.63	+0.99	3.20	0	7	21	8	2	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	80.8	....	104	12	47	28	40	1.50	−2.09	0.87	0	5	29	0	2	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	.....	......	.....	.....	.....	.....	....	......	....	......	....	....	....	....	....	......	Geo. H. Collins.
Warsaw	Benton	883	11	80.4	+2.2	105	7	46	29	46	2.67	−1.58	0.87	0	12	14	17	0	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	.....	......	.....	.....	.....	.....	....	3.42	....	1.63	0	5	19	6	6	sw.	John W. Cauthorn.
Section means and extremes		....	....	80.7	+3.7	105	7†	43	29	53	2.66	−1.27	3.20	0	6	20	8	3	sw.	
Northwest Plateau																				
Avalon	Livingston	730	30	78.9	+1.7	102	2	51	28	35	2.50	−1.47	1.75	0	3	23	4	4	......	F. G. Ashbaugh.
Bethany	Harrison	881	26	77.0	+2.7	102	4	44	28	39	4.87	+0.70	1.00	0	8	10	15	6	sw.	M. H. Moulton.
Chillicothe	Livingston	....	1	.....	......	.....	.....	.....	.....	....	1.85	−3.00	1.05	0	8	18	5	8	......	Hocey O. Dupy.
Conception	Nodaway	982	31	.....	......	.....	.....	52	27	....	4.72	+1.01	1.08	0	8	13	15	3	se.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	.....	......	.....	.....	.....	.....	....	1.76	−2.44	1.19	0	7	20	5	6	s.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	76.6	+1.1	103	4	50	28†	37	6.94	+3.08	3.84	0	8	20	4	7	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	78.9	+3.1	99	3	55	28	30	3.82	−0.93	1.88	0	11	17	11	3	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	77.8	+2.7	103	4	51	27	36	2.37	−1.67	2.00	0	7	23	3	5	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	78.9	+3.3	100	3†	48	28†	37	2.63	−0.61	1.76	0	5	23	0	8	s.	J. W. Keithley.
Liberty	Clay	864	27	79.4^{a}	+3.1	103	12	48	28	38	3.20	−1.06	1.50	0	6	25	4	2	s.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	74.8	−0.2	101	4	47	28	40	4.81	+0.35	1.30	0	12	17	3	11	s.	J. R. Brink.
Oregon	Holt	1,113	60	75.6	+0.5	96	4†	50	27†	30	4.22	+0.13	3.21	0	7	13	14	4	se.	Tom Curry.
St. Joseph	Buchanan	967	41	78.3	....	102	4	50	28	33	4.24	+0.39	2.35	0	10	11	13	7	s.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	76.2	....	98	4†	47	28	35	4.39	....	1.29	0	8	20	6	5	se.	John F. Frazier.
Trenton	Grundy	812	21	77.8	+2.1	98	4†	52	27	29	5.19	+1.69	1.76	0	7	15	9	7	se.	W. H. Estes.
Section means and extremes		....	....	77.5	+2.0	103	4†	44	28	40	3.90	−0.27	3.84	0	8	18	7	6	s.	
State means and extremes		.....	....	79.2	+2.9	107	4	41	28	53	4.05	+0.49	6.48	0	7	19	7	5	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a b c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† And also other dates. ** Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for August, 1916.

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
ne	Missouri				T.				.67		.03	.03			2.21	.26							.07				.35	.03					3.65
ck	Grand								.03			.05			.85	.90	.08						.12				T						2.03
Hill	Chariton		.08						.25			.28		.17	.72	.19							.46				.05						2.20
a***	Missouri		T.						.03			T.	T.	T.	1.53	.01							.01			.28	.17	.01				T.	2.04
	do		T.	T.								.07			3.20								.12			.29	.02						3.70
	do																																.....
	Mississippi																																.....
al***	do	.02					T.	.44	.03			.70	2.32	1.70	.75	3.19							T.				T.	T.					9.15
n.	Missouri	1.05	T.	.26				T.	2.00				.13	T.	.71	.23	.01							.03			.75	.09	.07				5.33
City	do			1.15					1.17						.68	.75	.03						.21				.47	.12	.08				4.66
ville	Chariton							.32			T.	.02		.10	.82								.26				.04					T.	1.56
na	Mississippi	T.		T.	T.				1.25	.43	2.90	.43		2.78	.48	6.48											.11	T.					14.86
	Chariton	T.			.01			T.	.05			.38	2.22	1.31	.12	2.10	.01						.53					.02	T.				6.75
	Mississippi	.61		T.					1.86	T.		1.08	.98	.33	2.60	.13	.01						T.	T.			.13	T.					7.73
l	Meramec							T.	2.05			.42		1.48	.84	.75							T.				.36	.16					6.06
a	Mississippi								.31			.64	1.77	2.00	.06	2.05		.04					2.04										8.91
erine	Grand	.04										.70	1.32	.75	.24	3.15							.03				.04						6.27
les.	Missouri		T.						4.45			T.	.33	1.35	1.52	2.94							.51	.34	.30								11.74
s (1)***	Mississippi		.34					.27	.36		T.	.94	2.10	.99	3.67	1.73							T.				.20	.09					10.69
s (2)	do		.64					.37	.39			.96	3.65	1.37	4.17	1.66				T.	T.						.35	.09					13.65
lle	do		.15	.15					.47			1.95	1.35		.05	2.40		.45					.68				.23						7.88
le	Grand	T.	T.		T.				1.35			3.15	1.90	1.70	T.	.40											T.						8.50
ton	Mississippi				.26				.80				.24		.66	.31											.66	.02	T.				2.95
st Lowlands.																																	
irardeau	Mississippi																																.....
ll	do																																.....
rsville	do		.08			T.			T.						1.00		T.					.58	T.	.03				.10	.95				2.74
an	Black		1.00																								.08	.03					1.11
	Mississippi		.50					.51					.08	.12		.25							.12				.80	.07					2.45
Hill	do								.50				.12				2.10							.36				.65	.03			.30	4.06
adrid	do		.50	.06		.26	T.		.12	.04					T.		.01												.10				1.09
near	do															.55												.70					1.25
Bluff	Black		.02	.58						.12							.03							2.13				.12	T.				3.00
n	Mississippi		1.19						.68	T.			T.				2.20						.11						.08				4.28
ll.***	do		.61						.05	T.				T.	T.	.12	.47						.83				T.	.20					2.28
Plateau.																																	
on	Gasconade			.82					.35		.06					.35	.65							.07				.15	.20				2.65
	Osage																																.....
ee	Black		.40						1.40														.53										2.33
	Osage									.18						.14	.13											.55					1.00
le	White															1.00	.90																1.90
	Gasconade														.11	.09												1.30					1.50
	Neosho			1.33	T.	T.	.31		.05	T.						.81	1.25											.19					3.94
	Osage	.07	.90					.40					.06	.30	.14	.14							.17					.46					2.64
ity	Black																																.....
	Meramec		.76						1.00					.11	.21	.02	.20						.50				.06	.37					3.23
nd	Black	.60	.41						.95							1.46											2.22						5.64
r	White													.30	.60	.30							.10									.10	1.40
	Gasconade		.62						.31	T.					.25	.26	T.						.34				T.	T.					1.78
	Mississippi	.05		.95					.75				.47		.04	T.	.70				T.							1.05	.10				4.11
nong	Black		2.23			.07			.32								.69											T.					3.31
	Osage	.12									.85			.04		.05	.15												.38				1.59
od	do	.48															1.81						T.					.37					2.66
n Grove	White			.62							.04						.15						.03	.07				.25	.15				1.31
ernon	Neosho																																.....
	do			1.22			T.							T.			.40						1.57					.16			T.	T.	3.35
	Meramec	.57		2.39					.75						T.	.13	.40	T.						.37				.10	.33				5.04
eld***	White		1.85				.02		T.	2.02				T.		.26	.03										.02	.25					4.45
est Plain.																																	
	Osage				1.53	T.	.03	T.															.28				T.	.52				.49	2.85
n City	do						T.	.04								T.							.18				.02	1.62				.49	2.35
	do									.20					.10																		0.30
nville	do				.18				.11						.25								.08				.13						0.75
	Neosho			.32				.08	.06								.76						1.98	T.				.02	.36				3.58
e	Missouri			.50			T.	.12	T.	1.20	T.			T.	2.25								.27				.20	T.				T.	4.54
ll	do			.64						T.	T.	.23		T.	3.20	.11							.15				.27	.03				T.	4.63
	Osage						.07				.05												.13					.38				.87	1.50
sburg	Missouri																																.....
	Osage				.23			T.	.09		.87		.07	.10	.15	T.	.04						.27	.08			.03	.56	.18				2.67
y	Missouri			T.					.39		1.04			T.	1.63	.02							T.				.34						3.42
est Plateau.																																	
	Grand							.75						.60	1.15																		2.50
	do	.35						T.				.82	1.00	.97	.80	.60											.30					.03	4.87
the	do		.06						.03		.21			.04	1.05	.14							.27				.05						1.85
tion	Missouri	.04	T.	.88				T.		T.	T.	.84	.20	.90	1.08												.54					.24	4.72
	Grand							.09				.24	.01	.16	1.19	T.							T.				.04					.03	1.76
ity	do	.50						.08			T.	3.84	.35	.87	.94	.02					T.						T.					.34	6.94
ity***	Missouri		.71	.02				.01	.10					.56	1.32	.01						.16	.52			.18						.23	3.82
	Grand	.01					.09		.06				.10		2.00	.08											.03						2.37
on	Missouri			.25							T.				1.76	.18							.10				.34						2.63
	do		.54											T.	1.50	.30					T.	T.	.35				.46					.05	3.20
le	do	.03	.16	.06	.90			T.	.08			.42	1.30	.79	.73	.15	.02				T.						.17						4.81
	do		.14					T.		T.	.07	.13			3.21	.07										.39						.21	4.22
ph***	Missouri	T.	T.				T.	T.			.88	.21		.73	1.64	.10					.41	.04				.09	.04	T.				.10	4.24
	do	.54						.03				1.11	.12	1.12	1.29												.04					.14	4.39
	Grand	.11		.08			T.	T.			T.	1.76	1.23	.53	.72							T.				.76	T.					T.	5.19
																																	......
																																	......

cept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace. o · less than 0.01 inch.
lar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
fall not recorded

Evaporation from Standard Free Exposure at Columbia, Mo.

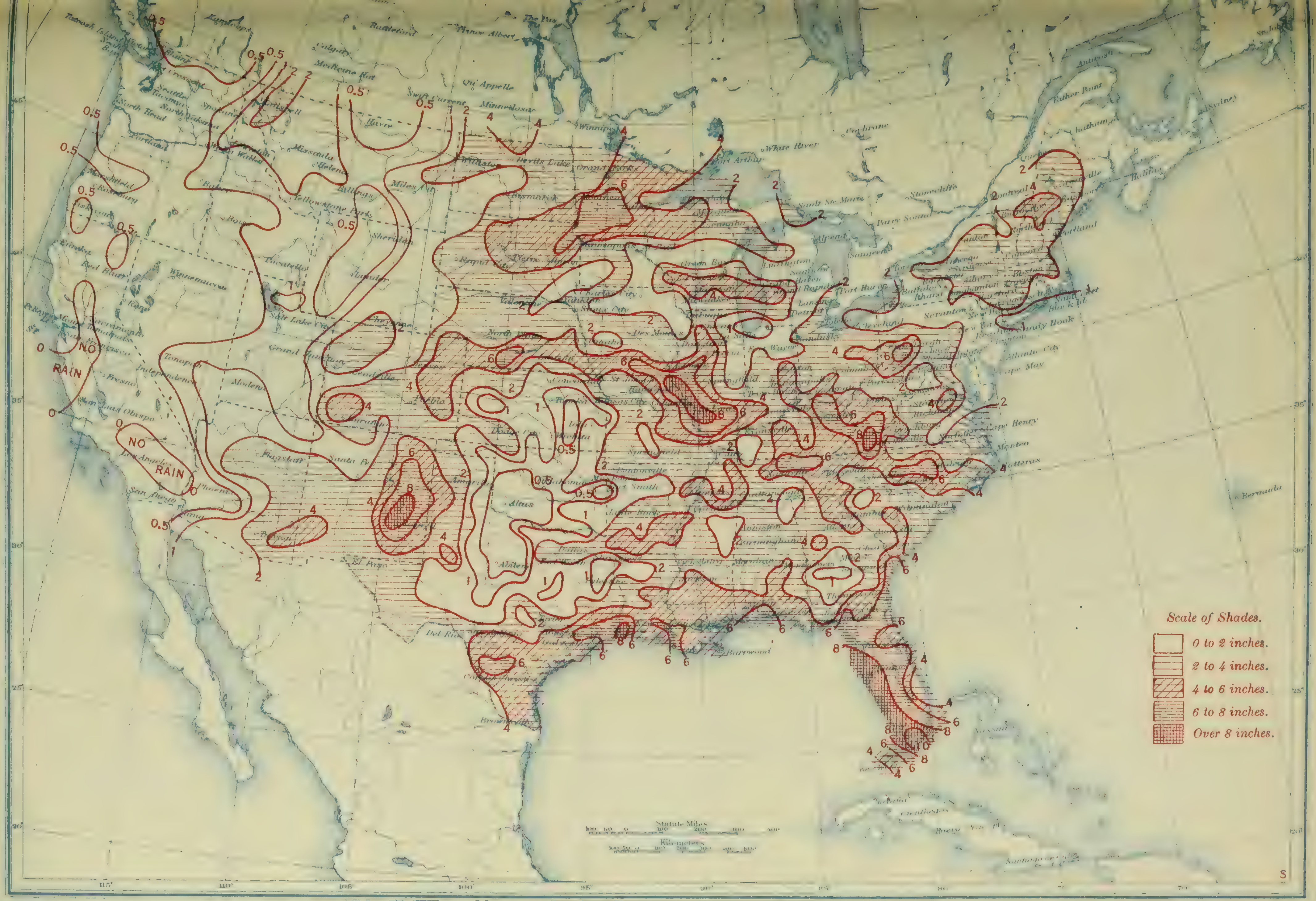
Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	mo.
aporation (inches)	.247	.252	.141	.245	.305	.360	.219	.273	.261	.267	.325	.149	.280	.17	.048	.132	.138	.254	.23	.205	.242	.205	.178	.199	.12	.365	.148	.082	.168	.159	.163	6.540
rly wind velocity rface of pan	1.2	1.0	0.6	0.8	1.0	1.1	1.3	1.3	1.0	1.2	1.6	1.7	1.8	2.0	1.1	0.9	0.6	0.9	0.6	0.5	0.8	0.8	1.2	1.0	1.1	1.5	1.4	1.0	0.9	0.7	0.8	1.1

Daily temperatures for August, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	91	97	98	98	95	91	97	92	94	97	92	100	73	87	83	88	94	94	95	97	92	79	84	90	86	79	74	80	85	89	82
	Minimum	70	70	73	74	75	77	78	71	71	71	76	71	69	64	65	68	70	70	72	74	75	72	57	57	63	64	56	48	54	54	65
Columbia	Maximum	91	93	99	99	98	92	100	91	96	98	98	100	76	83	90	88	96	96	96	97	98	80	83	85	91	85	68	77	84	88	87
	Minimum	71	73	71	75	76	75	75	72	72	75	74	72	66	63	71	67	75	76	73	75	73	61	56	58	60	66	52	46	54	59	65
Fayette	Maximum	95	95	102	101	100	92	101	94	98	98	98	100	74	82	90	89	95	96	97	99	97	86	83	88	91	84	69	80	86	84	85
	Minimum	72	71	74	74	77	77	79	76	70	74	75	70	68	65	72	69	75	74	74	75	76	60	56	61	66	64	57	48	52	58	65
Hannibal	Maximum	92	94	98	99	97	92	99	89	90	97	90	92	72	69	81	88	91	97	96	96	95	82	80	87	84	78	71	76	80	85	85
	Minimum	71	75	73	74	77	76	75	73	69	76	69	69	62	60	68	64	71	76	73	73	76	62	57	62	66	65	52	48	52	59	67
Jefferson City §§	Maximum	92	96	97	98	96	92	100	90	95	95	98	100	78	86	92	89	96	96	96	97	99	81	83	91	92	85	66	77	83	88	87
	Minimum	71	65	69	73	74	74	77	72	71	74	75	72	72	64	65	70	72	74	71	73	72	72	57	59	60	65	63	48	49	54	62
Macon §§	Maximum	93	93	96	100	100	92	99	92	96	99	95	96	73	76	83	90	95	95	96	97	95	78	82	84	85	77	72	78	81	87	87
	Minimum	69	70	71	72	75	76	77	70	66	69	71	69	62	60	61	63	66	74	71	72	71	68	55	62	61	62	55	48	51	55	61
Mexico §§	Maximum	91	93	98	99	99	93	101	90	93	98	96	98	72	78	91	89	96	97	98	96	98	82	82	90	89	86	69	78	85	89	90
	Minimum	68	68	71	73	74	74	72	71	68	70	71	69	69	61	61	63	64	74	72	73	72	70	54	56	61	63	53	45	53	50	59
Oakfield	Maximum	93	95	101	102	99	97	102	87	92	95	97	95	85	81	87	89	97	97	98	96	97	83	80	89	89	86	73	77	82	87	87
	Minimum	71	74	68	74	74	73	76	70	71	73	75	70	66	59	67	70	72	75	75	75	73	68	55	57	62	65	60	48	57	58	60
St. Catharine	Maximum	86	96	93	96	99	90	97	89	94	95	88	92	74	73	79	86	91	92	94	95	93	86	86	86	86	77	71	78	82	85	81
	Minimum	69	74	71	71	73	75	75	68	72	73	69	68	60	60	67	62	74	73	71	73	74	65	54	59	61	62	53	47	52	57	53
St. Louis (1)	Maximum	89	90	94	96	94	93	94	87	90	93	94	91	73	74	85	85	94	95	94	96	94	85	80	85	88	85	71	75	78	85	84
	Minimum	72	71	73	77	78	77	72	73	73	76	70	69	67	59	67	71	75	78	80	80	77	66	61	66	68	65	61	55	63	65	66
Unionville §§	Maximum	94	96	94	96	98	94	96	86	91	96	86	84	86	70	76	85	92	90	93	94	93	80	85	91	88	84	83	86	81	88	90
	Minimum	65	63	70	71	73	74	75	60	62	66	60	62	58	60	61	62	66	70	70	71	70	62	52	56	54	57	47	46	50	53	60
Warrenton §§	Maximum	95	97	103	102	100	94	101	91	96	98	98	100	72	78	89	90	98	99	100	98	100	84	82	92	91	86	68	78	85	91	89
	Minimum	70	74	69	74	74	74	76	71	70	74	75	68	71	60	63	66	69	73	73	73	71	72	56	61	63	62	61	50	54	57	60
Southeast Lowlands.																																
Cardwell	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Caruthersville	Maximum	97	90	95	99	95	96	99	90	92	94	100	99	95	93	93	94	100	100	99	100	93	92	85	87	94	95	87	82	84	87	91
	Minimum	79	76	75	76	76	74	75	78	72	75	75	77	77	74	74	77	76	75	77	75	72	74	72	59	62	65	69	64	61	58	60
Doniphan	Maximum	97	93	93	95	90	95	99	93	95	97	99	100	94	100	95	90	98	97	100	100	96	90	84	96	98	81	86	86	85	96	98
	Minimum	74	73	68	72	75	71	76	74	69	72	74	74	85	74	84	75	72	71	64	76	70	73	64	62	60	67	58	54	56	55	55
Jackson	Maximum	96	94	94	97	95	97	98	92	84	93	102	95	95	92	93	94	98	103	100	100	96	88	80	90	97	95	84	83	82	93	90
	Minimum	73	65	68	71	73	71	70	70	72	72	74	73	72	68	72	70	78	71	72	68	68	69	60	52	55	61	64	55	49	51	52
Marble Hill	Maximum	99	87	93	96	90	95	100	90	85	90	102	95	91	90	93	90	96	99	99	98	94	88	89	88	95	88	74	85	85	88	85
	Minimum	75	70	70	72	72	73	72	72	73	72	74	73	73	76	73	79	78	72	72	70	70	62	60	55	55	57	65	55	52	52	52
Poplar Bluff §§	Maximum	98	97	83	94	95	90	95	97	92	90	92	100	98	91	93	94	91	99	99	99	98	95	85	83	90	94	96	79	86	95	88
	Minimum	72	71	68	69	72	70	71	72	71	71	72	75	74	70	72	71	71	70	72	72	68	70	63	56	58	59	60	57	55	53	55
Ozark Plateau.																																
Birchtree	Maximum	99	95	91	91	92	91	96	87	86	91	94	96	92	90	90	90	94	95	97	98	95	89	83	88	95	98	80	..	86	88	86
	Minimum	69	68	67	69	71	70	70	70	67	69	70	72	72	68	71	....	70	....	69	71	68	69	53	53	55	63	64	....	51	58	59
Cassville	Maximum	95	95	94	92	93	89	96	95	95	93	96	98	98	97	97	96	94	94	96	94	96	97	80	90	94	95	98	99	86	88	86
	Minimum	71	66	70	66	69	71	68	73	69	68	67	77	72	73	72	68	68	65	67	67	65	68	58	48	51	67	64	56	49	53	52
Eldon	Maximum	96	93	95	98	97	93	99	98	93	95	93	99	86	91	90	90	96	96	99	99	100	87	85	92	96	90	72	78	86	89	87
	Minimum	68	67	66	70	70	70	70	69	68	70	68	69	68	63	74	70	70	67	71	71	71	69	53	65	68	66	59	41	49	51	62
Fruit City	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gano	Maximum	96	92	96	98	94	95	100	90	93	95	98	101	89	93	90	90	95	94	92	102	101	82	82	90	96	97	75	80	92	90	90
	Minimum	67	70	66	68	72	70	75	69	68	70	71	74	67	60	66	70	71	71	70	70	70	69	55	53	56	61	59	49	51	62	62
Hollister	Maximum	100	104	102	104	100	98	102	100	102	100	102	105	106	100	104	96	98	100	100	102	102	92	88	92	98	96	98	96	92	90	88
	Minimum	76	70	68	66	70	78	80	82	80	78	80	82	84	71	76	72	78	80	74	78	74	72	60	50	54	60	56	60	56	60	56
Ironton §§	Maximum	94	92	93	94	91	93	96	88	84	92	96	95	85	87	90	88	94	95	97	97	94	88	82	87	95	93	72	79	82	85	85
	Minimum	69	71	69	70	69	71	71	71	71	71	72	72	72	67	74	70	67	68	67	67	66	71	56	48	54	60	61	52	47	50	50
Lebanon §§	Maximum	99	102	101	102	98	95	104	98	99	99	98	103	92	93	94	89	92	92	98	100	102	96	80	78	98	103	70	78	92	94	98
	Minimum	70	70	67	70	71	70	70	69	69	69	70	74	74	68	68	70	71	72	70	75	71	74	53	60	58	57	57	45	46	55	60
Mountain Grove §§	Maximum	98	93	94	94	92	93	98	95	92	97	98	101	100	95	98	90	99	97	101	97	100	89	85	90	97	97	77	81	87	90	88
	Minimum	69	72	66	69	71	70	72	73	68	69	71	74	74	71	73	68	71	73	72	73	71	71	56	52	56	66	66	51	57	59	62
Neosho	Maximum	97	99	99	95	95	92	96	96	97	96	98	97	100	100	100	95	97	96	99	99	98	95	81	91	96	95	92	80	87	89	88
	Minimum	70	67	70	70	70	74	73	68	70	73	73	69	70	75	75	72	72	76	68	67	67	68	59	52	55	59	64	52	51	56	59
Rolla §§	Maximum	95	95	95	96	95	94	97	90	89	95	99	101	82	93	91	91	97	97	100	100	100	81	83	92	95	91	65	80	86	90	89
	Minimum	70	70	67	64	72	71	71	70	70	70	72	74	74	66	66	72	73	73	69	69	69	73	55	56	57	61	64	48	50	55	61
Springfield	Maximum	92	95	91	91	90	87	94	92	91	90	92	95	94	92	93	87	91	91	93	92	94	83	78	87	92	92	71	75	83	85	83
	Minimum	75	68	70	70	74	71	74	72	69	71	75	77	74	73	73	72	73	73	75	76	73	64	57	61	64	67	56	52	67	62	63
Southwest Plain.																																
Amoret	Maximum	100	102	102	99	94	96	98	91	99	97	100	102	96	102	95	97	97	97	100	104	102	95	86	86	98	92	82	80	97	89	82
	Minimum	69	71	70	71	72	74	73	70	68	75	76	69	70	67	77	78	69	70	70	68	71	70	54	58	58	59	55	45	47	54	63
Clinton	Maximum	99	102	102	101	100	95	103	94	101	100	102	103	94	100	99	93	100	98	101	101	102	93	88	94	99	91	77	81	88	92	85
	Minimum	71	72	70	71	74	75	73	74	70	72	74	71	72	66	79	70	73	72	70	72	72	72	56	55	60	61	59	49	50	51	61
Harrisonville §§	Maximum	95	99	101	99	98	91	102	91	101	101	101	104	82	99	92	94	100	100	102	101	103	90	86	91	97	86	71	82	98	94	78
	Minimum	71	71	71	72	74	74	73	71	69	73	77	70	70	65	67	68	69	72	72	70	74	70	54	58	61	62	59	45	45	48	58
Lamar §§	Maximum	101	103	101	99	98	97	101	94	104	100	102	105	103	104	100	94	97	95	100	99	102	83	83	92	97	96	64	81	88	96	87
	Minimum	73	71	72	71	74	75	73	69	70	74	74	72	77	71	77	71	72	70	72	72	71	68	57	55	58	61	63	51	51	58	63
Lamonte	Maximum	96	102	98	100	96	99	101	97	98	98	99	101	86	90	91	93	96	97	99	99	100	88	86	83	87	83	71	83	86	87	74
	Minimum	68	70	78	80	75	77	75	73	67	73	74	70	70	67	67	70	75	74	75	77	73	65	51	59	63	59	56	46	43	51	66
Marshall	Maximum	94	101	102	98	97	92	99	94	98	96	98	101	89	87	90	90	94	93	96	96	97	85	84	89	90	84	72	78	85	88	82
	Minimum	80	72	68	71	71	75	75	70	71	71	68	69	67	63	70	69	74	69	67	71	72	67	55	....	66	62	56	48	57	50	62
Warrensburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	99	100	104	101	101	96	105	95	103	100	103	104	82	97	95	93	101	100	104	103	104	83	85	93	100	93	68	78	87	93	90
	Minimum	71	70	68	68	69	71	75	73	68	71	75	73	72	63	66	70	72	71	66	68	69	70	52	53	54	60	60	47	46	53	60
Northwest Plateau.																																
Avalon	Maximum	88	102	100	101	100	93	100	94	98	100	92	101	86	76	81	90	94	94	98	100	98	89	88	94	94	82	77	83	90	92	85
	Minimum	70	70	71	72	74	70	71	70	72	69	70	70	64	53	54	60	75	70	72	75	74	60	56	64	65	58	53	51	55	58	65
Grant City	Maximum	81	95	101	103	102	97	94	76	99	100	86	95	78	70	86	87	95	95	96	99	95	78	85	93	85	76	75	82	87	89	75
	Minimum	67	66	73	71	72	74	75	63	64	73	64	63	55	61	66	65	72	69	68	70	74	62	54	55	59	60	54	50	50	56	65
Kansas City	Maximum	88	95	99	97	95	90	93	88	96	96	92	93	76	90	81	89	95	95	97	96	98	78	82	90	89	76	68	77	84	88	75
	Minimum	71	71	73	75	78	76	76	70	72	76	74	68	64	63	70	71	76	75	78	79	76	64	60	65	65	62	55	55	60	59	66
Kidder §§	Maximum	87	100	100	103	100	94	96	91	99	102	89	102	75	84	85	90	98	95	97	100	97	77	87	90	89	74	77	82	87	90	78
	Minimum	69	68	69	71	73	74	75	66	65	66	70	66	62	60	62	66	68	72	71	71	73	67	57	54	59	60	51	54	53	55	58
Lexington §§	Maximum	93	98	100	98	97	91	98	92	96	98	96	100	74	87	83	88	95	94	96	98	98	80	84	90	90	80	72	78	85	88	75
	Minimum	71	71	72	75	74	76	78	71	67	73	76	69	70	61	71	69	74	76	72	73	74	71	54	62	62	63	54	48	48	55	65
Maryville §§	Maximum	79	96	96	101	97	91	91	90	97	96	76	93	69	80	82	88	94	93	95	97	92	77	85	92	87	71	75	80	76	87	75
	Minimum	70	66	68	70	72	74	73	61	60	62	65	63	55	55	62	65	68	70	67	68	72	59	52	52	57	58	52	47	49	55	59
Oregon	Maximum	81	90	91	96	96	92	90	81	94	95	81	96	80	92	81	86	92	93	92	95	91	79	80	86	84	75	70	77	81	83	75
	Minimum	70	69	75	73	71	74	71	63	66	72	63	63	56	62	66	66	71	71	71	70	71	61	53	56	59	58	50	50	53	58	64
St. Joseph	Maximum	89	97	100	102	98	94	89	90	97	100	80	100	73	86	82	91	96	96	96	97	95	76	83	90	89	73	74	79	85	87	75
	Minimum	73	72	75	76	79	77	74	68	67	71	68	67	62	64	70	69	75	77	75	74	76	60	54	63	63	58	54	50	58	58	67
Trenton	Maximum	90	95	95	98	97	94	95	90	93	98	97	93	92	75	79	86	90	92	93	94	93	91	81	85	85	80	73	74	82	85	86
	Minimum	72	70	73	72	75	77	74	73	68	73	70	67	60	63	68	65	72	71	72	73	75	66	55	61	60	62	52	67	53	58	61

. , . . , . . . , etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is char
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
Statute Miles
Kilometers
S

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

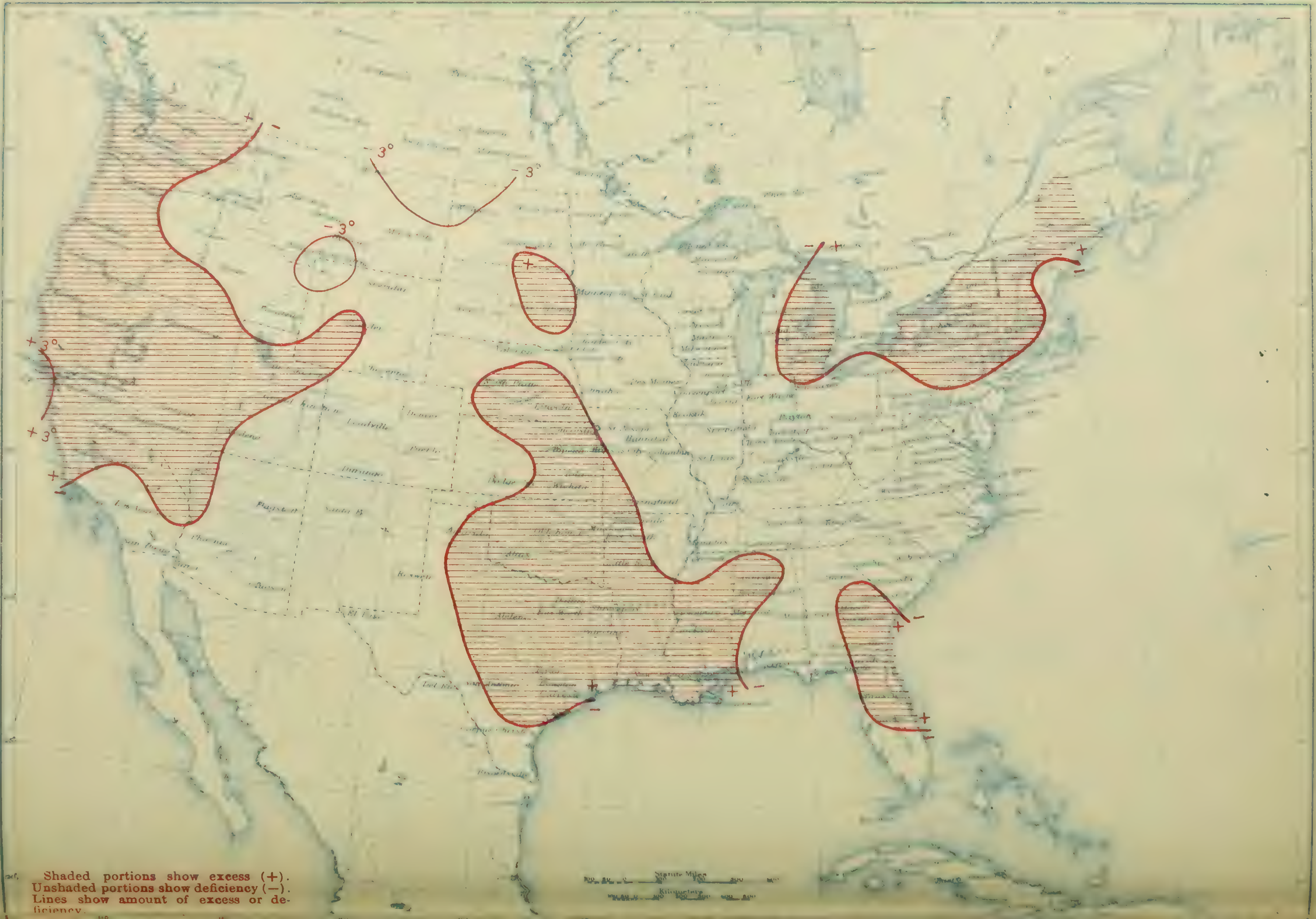
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

SEPTEMBER, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
OCTOBER 18, 1916.

Departure of the Mean Temperature from the Normal, September, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

L. XX. COLUMBIA, MO., SEPTEMBER, 1916. No. 9.

GENERAL SUMMARY.

September, 1916, was, as shown by the monthly State aver- es, somewhat cooler and drier than usual. There were many ight days, though, and, after the first week, which was rather rm, the weather was exceptionally pleasant from a physio- gical viewpoint.

Preparing the ground for fall seeding made fair progress after e rains of the 11th and 12th. Pastures were in fair condition the close of the month, and stock looked well. Corn ma- red satisfactorily.

A heavy to killing frost of the 29th badly damaged legumes t harvested, fall gardens, and some late corn. The effects re more noticeable in the bottoms than on the higher lands. As a result of the early frosts forest vegetation began to as- me the brilliant autumn tints much earlier than usual.

TEMPERATURE.

The monthly mean temperature, 65 stations reporting, was .7°. The mean departure from the normal for 52 stations ving 10 or more years' record was minus 1.5°, which is the atest deficiency for this month since 1902. From the 13th 19th, inclusive, the 22d and 23d, and from the 28th to the th, inclusive, the weather was unusually cool, the daily mean nperature ranging from 6° to 14° below the normal during e first period, about 8° during the second, and from 7° to ° during the last named period. Light frosts were more or s general on the 16th, 19th, and 23d, one station, Ironton the Arcadia Valley) reporting a temperature of 28°, on the th. The coldest day of the month, however, was the 29th, en twenty-nine stations experienced temperatures of 32° or ver, the absolute minimum being 27°, at Bethany, in the rthwest plateau. The warmest days were the 4th, 5th, and ; and the 25th, and 26th. As a general thing, tempera- res were 90° or higher from about the 2d to the 7th; but y were 100° or higher at but two stations, on two days, the and 6th. The extremes as here shown, although quite rked, are not unusual for September. The greatest daily ge was 53°, at Rolla on the 30th.

PRECIPITATION.

The average precipitation, as determined from the records of stations, was 2.94 inches. The departure from the normal 66 stations having 10 or more years' record was minus 0.86 h. The monthly precipitation was in the form of showers, heaviest and most general falling on the 1st, 7th, 8th, 11th d 12th, 27th and 28th. As a rule the total monthly ounts varied between 2 and 4 inches, a few stations receiving ger amounts than the latter figure, while at 8 or 10 stations fall did not quite equal 2 inches. The greatest amount orded in any 24 consecutive hours was 5.69 inches, at Gano the 8th.

The average number of days with 0.01 inch or more precipi- ion was 6.

The total deficiency in precipitation for the three months, y, August, and September, 1916, for the five physiographic isions was as follows: northeast plain, 0.53 inch; southeast lands, 3.03 inches; Ozark plateau, 2.47 inches; southwest in, 2.58 inches, and northwest plateau, 2.95 inches.

EVAPORATION.

The total evaporation from standard free exposure at Colum- , Mo., was 3.84 inches, and 2.70 inches less than during August. The average hourly wind velocity at the surface of the pan was 1.1 miles, the same as last month. The total rainfall was 4.48 inches, (7 a. m. August 31 to 7 a. m. September 30) which is 2.34 inches greater than in August.

WIND.

The prevailing winds were from the south. The total number of miles, 8 stations equipped with anemometers reporting, was nearly normal; the average hourly velocity was 1.1 above normal. Except fresh to strong winds on the 26th, and 27th there were no storms worthy of note.

SUNSHINE AND CLOUDINESS.

There were more clear days than usual. The average number of hours of sunshine, 6 regular stations reporting, was 283, or about 76 per cent of the possible, and 11 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fog—September 2d, and 13th. *Frost*—September 15th, 16th, 18th, 19th, 23d, and 29th. The frosts were generally light, except on the 29th, when killing frosts occurred at many stations. *Hail*—September 20th, 26th, and 27th. *Thunderstorms*—September 1st, 3d, 4th, 5th, 6th, 20th, and 27th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.04	82	......	289	77	4,855	6.7	28	w.	28
Hannibal	30.04	81	......	......	......	5,981	8.3	28	sw.	20
Kansas City	30.00	76	54	295	79	7,929	11.0	41	s.	26
St. Joseph	30.00	81	55	291	78	5,777	8.0	28	nw.	28
St. Louis	30.03	77	64	282	76	8,922	12.4	56	s.	27
Springfield	30.05	79	53	272	73	7,210	10.0	34	s.	27
Cairo, Ill	30.04	84	64	......	......	5,503	7.6	36	w.	27
Keokuk, Iowa	30.03	83	67	268	70	5,275	7.3	27	s.	26

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	65.2	−3.7	97	28	1.11	−2.56	......	0	4	....	....	....
1889	64.7	−4.2	94	31	4.66	+0.99	......	0	11	....	....	....
1890	63.7	−5.2	98	34	3.98	+0.31	......	0	9	....	....	....
1891	70.6	+1.7	104	30	0.63	−3.04	......	0	6	....	....	....
1892	67.8	−1.1	97	32	2.39	−1.26	3.00	0	4	19	6	5
1893	69.9	+1.0	107	26	3.92	+0.25	5.20	0	6	17	7	6
1894	68.5	−0.4	101	34	4.93	+1.26	3.07	0	5	13	11	6
1895	71.8	+2.9	104	25	2.45	−1.22	6.21	0	4	19	8	3
1896	65.0	−3.9	101	28	4.17	+0.50	4.40	0	10	11	10	9
1897	74.3	+5.4	105	27	0.74	−2.93	2.13	0	2	23	5	2
1898	70.9	+2.0	103	30	6.74	+3.07	6.10	0	9	15	9	6
1899	67.4	−1.5	108	16	2.04	−1.63	3.01	0	4	20	6	4
1900	71.1	+2.2	100	29	4.81	+1.14	3.79	0	10	13	10	7
1901	68.9	0.0	103	27	2.31	−1.36	2.80	0	6	18	8	4
1902	63.2	−5.7	95	30	4.78	+1.11	6.55	0	10	15	6	9
1903	66.4	−2.5	98	32	4.41	+0.74	6.77	0	8	17	6	7
1904	69.6	+0.7	96	34	3.85	+0.18	2.46	0	3	16	8	6
1905	69.6	+0.7	98	41	7.67	+4.00	7.90	0	10	15	6	9
1906	71.9	+3.0	98	36	4.15	+0.48	4.28	0	11	15	8	7
1907	68.9	0.0	101	31	1.93	−1.74	2.25	0	6	18	7	5
1908	71.6	+2.7	99	28	1.80	−1.87	2.68	0	4	18	8	4
1909	68.7	−0.2	105	28	4.62	+0.95	4.48	0	8	18	6	6
1910	69.5	+0.6	97	34	5.58	+1.91	4.63	0	10	14	6	10
1911	73.7	+4.6	105	39	7.13	+3.46	7.75	0	11	13	7	10
1912	68.6	−0.3	105	27	3.06	−0.61	3.61	0	6	17	5	8
1913	69.4	+0.5	109	27	4.63	+0.79	4.08	0	9	13	7	10
1914	69.6	+0.5	99	35	6.27	+2.52	9.22	0	9	15	8	7
1915	70.6	+1.5	98	34	5.25	+1.51	5.91	0	7	16	7	7
1916	67.8	−1.5	101	27	2.94	−0.86	2.80	0	6	19	7	4

Climatological data for September, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip., .01 of inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Boonville	Cooper	600	39								5.23	+0.83	1.57	0	9	20	4	6	se.	C. Randecker.
Brunswick	Chariton	652	36	67.0	−1.3	95	5	34	29	40	2.83	−1.16	1.55	0	8	18	4	8	s.	Louis Benecke.
Clifton Hill	Randolph	731		68.4		97	5	32	29	39	2.59		2.08	0	5	16	13	1		L. S. Harlan.
Columbia	Boone	784	26	66.8	−1.0	96	5	34	29	36	4.43	+1.58	1.99	0	4	15	6	9	s.	U. S. Weather Bureau.
Fayette	Howard	725	31	66.9	−2.0	94	5	31	29	36	3.16	−1.49	1.61	0	4					Prof. T. B. Smith.
Fulton	Callaway	818	24																	Dr. C. W. Knapp.
Gorin	Scotland	700	27								1.62	−2.60	1.17	0	4	12	10	8	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	66.2	−1.7	94	5	35	29	36	2.78	−0.79	1.74	0	7	18	7	5	sw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42								1.60	−2.47	0.44	0	9	13	8	9	e.	C. T. Maushund.
Jefferson City	Cole	628	30	67.9	−1.2	94	5†	34	29	44	1.14	−1.95	0.55	0	6	24	3	3	s.	Miss Emma Swift.
Keytesville	Chariton	660	3								2.57		1.65	0	6					J. T. Dewey, M. D.
Louisiana	Pike	500	38	66.5	−1.4	95	5	34	29	36	3.12	−0.21	1.31	0	6	23	4	3	sw.	I. T. Farrell.
Macon	Macon	881	18	65.8	−2.8	95	5	33	29†	44	2.15	−2.02	1.02	0	6	20	4	6	sw.	John A. Cook.
Mexico	Audrain	797	38	66.9	−1.9	97	5	33	29	41	3.71	−0.25	1.66	0	6	21	0	9		J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	68.0	−2.6	97	5†	35	29	37	2.71	−1.28	1.15	0	6	11	16	3	s.	E. E. Steines.
Palmyra	Marion	652	4	65.0	−3.6	94	5	33	29	45	2.80	−0.82	1.51	0	6	19	7	4	s.	W. B. Markell.
St. Catherine	Linn	914	3	66.0		93	5	31	29	35	1.26		0.99	0	5	17	12	1	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	67.5	+0.3	94	7	35	29	32	1.24	−1.47	0.73	0	3	20	4	6	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	68.3	−1.7	94	5	41	29	25	2.69	−0.22	1.11	0	5	19	5	6	s.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	67.8		95	6	39	29	27	3.08		1.43	0	7	16	8	6	s.	St. Louis University.
Steffenville	Lewis	576	23	67.5	−1.1	99	5	30	29	40	1.31	−3.14	0.90	0	4	16	11	3	s.	Frank Hall.
Unionville	Putnam	1,072	23	65.6	−1.7	95	5	31	29	46	2.04	−2.60	1.50	0	4	20	3	7	sw.	Geo. W. Davis.
Warrenton	Warren	865	25	67.3	−1.6	99	5	34	29	38	2.82	−1.03	0.98	0	7	13	11	6	s.	Prof. J. H. Frick.
Section means and extremes				66.9	−1.7	99	5	30	29	46	2.56	−1.17	2.08	0	6	18	7	5	s.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10																	D. L. Albert.
Cardwell	Dunklin	225	5	71.0		100	5†	33	30	45	2.42		0.95	0	7	21	8	1	ne.	F. E. Tate.
Caruthersville	Pemiscott	220	25	71.8	−1.3	96	6†	41	29	37	1.51	−1.67	0.75	0	4	25	5	0	se.	H. E. Averill.
Doniphan	Ripley	440	11	71.3	0.0	98	6†	34	30	38	2.67	−1.10	1.00	0	8	23	2	5	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	69.3	−0.8	98	6†	34	19†	44	4.06	+0.47	2.80	0	4	18	8	4	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	68.8	−2.0	98	6	35	30	44	2.90	−0.79	1.90	0	3	21	9	0	nw.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22								1.72	−1.61	0.74	0	7	19	2	9	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1								1.40		1.40	0	1	24	0	6	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	69.3	−2.6	98	6	35	30	45	3.61	+0.44	1.60	0	7	20	2	8		Miss Belle Kinne.
Sikeston	Scott	328	15	69.2	−1.7	87	4†	37	30	33	2.73	−0.25	1.24	0	7	23	3	4	n.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	69.6	−0.6	92	6	43	29	29	2.07	−0.40	0.74	0	7	16	10	4	s.	U. S. Weather Bureau.
Section means and extremes				70.0	−1.3	100	5†	34	19†	45	2.52	−0.61	2.80	0	5	21	5	4	s.	
Ozark Plateau.																				
Arlington	Phelps	695	14								3.65	−0.05	0.98	0	9	22	4	4	s.	G. V. Randolph.
Bagnell	Miller	594																		Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	65.6^{e}	−4.3	93	5†	32	30	38	2.26	−1.21	0.60	0	7	26	2	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	67.4	−3.0	98	5	32	29	33	3.15	−0.32	1.40	0	3	22	7	1	se.	A. C. Fink.
Cassville	Barry	1,500	5	67.4		97	2	33	29	39	3.16		0.85	0	9	25	3	2	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	70.4^{e}		97	8	30	29	42	2.22		1.16	0	2	23	4	3	se.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	69.8	−1.5	95	4†	34	29	38	5.25	+1.97	2.11	0	9	24	3	3	e.	H. E. Dean.
Eldon	Miller	934	15	67.2		94	5	30	29	40	2.67	−1.12	1.32	0	5	9	16	5	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3																	R. C. Walton.
Gano ‡‡	Dent	1,250	12	67.6	−2.7	98	7	34	29†	40	5.69	+0.79	2.28	0	8	21	4	5	s.	A. C. Leach.
Goodland	Iron	1,000	11	65.6	−2.7	93	5†	30	30	45	5.12	+0.06	2.28	0	7	18	7	5	s.	F. M. Adams.
Hollister	Taney	1,000	7	71.1		98	4†	42	16	42	4.57	+0.48	1.20	0	5	25	0	5	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	67.8^{c}	−1.0	93	5†	35	29	38	3.02	−0.97	1.35	0	7	26	1	3	se.	R. F. Harmon.
Ironton	Iron	925	38	66.2	−1.5	95	6	28	19	47	2.14	−1.35	1.36	0	5	9	14	7	s.	W. H. Delano.
Koshkonong	Oregon	911	15	70.0	−1.1	98	5†	38	29†	36	4.42	+0.79	1.45	0	6	14	13	3	s.	R. M. Hitt.
Lebanon	Laclede	1,265	27	70.4	+0.3	101	5	30	29†	47	2.43	−1.40	0.83	0	7	26	1	3	s.	Leonard E. Dickerson.
Lockwood	Dade	1,088	21	70.2^{a}	−1.8	95	5	31	29	36	2.57	−1.07	1.29	0	4	22^{a}	6^{a}	1^{a}	ne.	C. S. Crow.
Mountain Grove	Wright	1,490	17	67.8	−1.1	95	5	34	29	38	2.02	−2.15	1.12	0	7	21	7	2	s.	Mo. Fruit Exp. Sta.
Mount Vernon ‡‡	Lawrence	1,480	37																	J. R. White & Son.
Neosho	Newton	1,083	33	68.0	−2.6	95	5†	30	29	41	4.64	+0.55	1.40	0	10	19	9	2	s.	W. O. Buck.
Rolla	Phelps	1,139	34	67.8	0.0	99	5	33	29†	53	2.77	−1.03	1.14	0	6	18	11	1	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	68.2	+0.3	92	5	35	29	30	1.19	−2.57	0.53	0	7	19	9	2	s.	U. S. Weather Bureau.
Section means and extremes				68.2	−1.6	101	5	28	19	53	3.31	−0.51	2.28	0	6	21	6	3	s.	
Southwest Plain.																				
Amoret	Bates	850	7	67.8		94	5	29	29	41	3.16		1.49	0	6	17	9	4	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	68.6	−2.2	94	5	33	29	33	3.21	−0.28	1.72	0	6	16	11	3	se.	W. G. Bigelow.
Clinton	Henry	800	29	69.2		96	5	33	29	38	2.52	−0.89	1.80	0	3	16	12	2	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	67.4	−0.9	99	5	30	29	41	4.62	+0.34	1.95	0	8	14	3	13	sw.	A. J. Sharp.
Lamar	Barton	964	35	69.7	−0.7	97	5	29	29	39	3.04	−1.09	1.67	0	6	25	1	4	se.	Dick B. Houston.
Lamonte	Pettis	863	27	64.7		93	6	29	29	42	5.49	+1.24	1.90	0	4	18	11	1	sw.	J. Ed. Hall.
Marshall	Saline	779	25	67.2^{a}	−1.4	94	5	31	29	40	2.16	−2.25	1.21	0	5	16^{a}	8^{a}	5^{a}	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	69.4		97	5	30	29	37	2.31	−1.94	1.10	0	5	22	6	2	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37																	Geo. H. Collins.
Warsaw	Benton	883	11	67.4^{a}	−4.0	97	5	30	29	42	4.66	+0.03	2.00	0	6	20	10	0	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1								1.97		0.84	0	8	18	6	6	sw.	John W. Cauthorn.
Section means and extremes				67.9	−1.8	99	5	29	29	42	3.31	−0.60	2.00	0	6	18	8	4	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	69.8	+0.7	98	5	35	29	38	2.45	−3.13	1.65	0	3	21	8	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	66.4	−0.3	96	5	27	29	42	1.42	−2.22	1.05	0	3	19	9	2	sw.	M. H. Moulton.
Chillicothe	Livingston		1								2.90	−3.58	1.70	0	4	18	4	8		Hocey O. Dupy.
Conception	Nodaway	982	31	66.0	−1.0	94	5	33	29	37	3.26	−0.39	2.55	0	5	15	14	1	se.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16								2.01	−2.23	1.13	0	6	20	6	4	s.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	66.4	−0.6	98	5	30	29	40	1.52	−2.27	0.94	0	3	23	5	2	s.	W. H. Campbell.
Kansas City	Jackson	963	27	67.8	+0.3	95	5	39	29	28	4.96	+1.20	1.79	0	8	20	8	2	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	66.3	−1.3	98	4	32	29†	41	2.66	−1.24	1.75	0	8	20	1	9	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	67.3	−1.3	95	5	32	29	32	3.44	−1.02	0.88	0	9	16	1	13	s.	J. W. Keithley.
Liberty	Clay	864	27	68.3^{b}	−0.8	96	5	32	29	46	4.92	+1.19	1.61	0	6	22^{a}	5^{a}	2^{a}	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	63.6	−2.4	99	5	28	29	46	2.72	−0.84	1.19	0	6	22	1	7	s.	J. R. Brink.
Oregon	Holt	1,113	60	65.4	−1.7	95	5	30	29	34	2.74	−0.95	1.16	0	5	15	12	3	s.	Tom Curry.
St. Joseph	Buchanan	967	44	67.3		97	5	33	29	33	3.51	+0.43	1.54	0	6	17	8	5	se.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	66.5		96	4†	29	29	37	4.55		1.90	0	6	22	6	2	s.	John F. Frazier.
Trenton	Grundy	812	21	66.6	−0.9	94	5	33	29	29	2.57	−1.59	1.54	0	4	18	6	6	se.	W. H. Estes.
Section means and extremes				66.7	−0.8	99	5	27	29	46	3.04	−1.19	2.55	0	5	19	6	5	s.	
State means and extremes				67.8	−1.5	101	5	27	29	53	2.94	−0.86	2.80	0	6	19	7	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports a used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1. of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D No. 1.

Daily precipitation for September, 1916.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
east Plain.																																
lle	Missouri	1.20	.06		T.			.23	.48				.06									.96				.05		1.57	.62				5 23
wick	Grand	.54	.01		.07			.05	.32				.03															1.55	.26				2.83
Hill	Chariton	.30			.04			.16					.01													2.08							2.59
na***	Missouri	1.04		T.				1.07				T.	T.					T.		T.	.33				T.			1.99					4.43
e	do	1.09						.42				.04									T.							1.61					3.16
	do																																......
	Mississippi				.23		02					.20																1.17					1 62
hal***	do	.18		T.	.05		T.	.19				.20	.40										T.					1.74	.01				2.77
an	Missouri	.43	.22						17				.09	16					T.		T.	.03						.04	.44	.02			1.60
son City	do	.55	.38										.03	.10								.03							.05				1.14
ville	Chariton	.56			.04			.22			.05	.05																1.65					2.57
ana	Mississippi	.58			.05		.04	.26				T.	.88															1.31	T.				3.12
	Chariton	.03	.09		.06	T.			.10														T.					85	1.02				2.15
	Mississippi	.38	.16	T.					.51				.22	T.							T.	T.						1.66	.78				3.71
ld	Meramec	.40			04			1.15	.02				.20					T.			T.				T.			.90	T				2.71
na	Mississippi	.03			.02				.07				.71															.46	1 51				2 80
eme	Grand			T.				.12				.05	.01													.09		99	T.				1.26
arles.	Missouri	.23											.28								T.							.73	T.				1.24
is (1)***	Mississippi	.37						89					.10					T.			.22							1.11	T.				2.69
is (2)	do	.35			T.			1.43	.01				.20					T			.24							.84	.01				3.08
ide	do				.22			.15					.04															.90					1 31
	Grand							T.					.34														.20	1.10	.40				2.04
ton	Mississippi	.45	.13						.37				T.	66				T.			.20					T.		.03	.98				2 82
st Lowlands.																																
irardeau	Mississippi																																......
il.	do	.15							.20			T.		.62	.10							.08	95		T.				.32				2.42
rsville	do	T.							.23			T.		T.								.10	.75						.43				1.51
an	Black	.20							28			T.	T.	.10	.05							.28	1.00		.11				.65				2.67
	Mississippi	.24							2.80					.12														.90					4.06
Hill	do									1.90											.10								.90				2.90
Madrid	do		.06						03	.17												.20	.46						.74	.06			1.72
(near)	do																												1.40				1.40
r Bluff	Black		.10						1.60	T.			.08		.10							T.	.60			03			1.10				3.61
n	Mississippi	.44	T.						.54	T.		.01	T.	.04	.01	T.							.45						1.24				2.73
ill.***	do	.08	T.					.39	.34			T.										.08	.44		T.			.41	.33				2.07
Plateau.																																
gton	Gasconade	11	.16			.12			.98				.10	.78							.26	.42							.72				3.65
l	Osage																																......
tree	Black	.60							.40			.10										.44	.22		.28				.22				2.26
ar	Osage	1.40						.70																				1.05					3.15
ille	White	.11						.51	.70			.08										.04	.77	.05				.05	.85				3.16
r	Gasconade	1.16																										1.06					2.22
	Neosho	2.11						59	.47			.09	.81					.04	.03				.41	T.				.70					5.25
	Osage	1.32						.78	.03																.03			.51					2.67
ity	Black																																...
	Meramec	.80						1.78	.22			T.	.15	.06							.08	.32						T.	2.28				5.69
land	Black	.06						2.28	.29				.15	.22							.06								2.06				5.12
ster	White	1.10						.85	1.00														.42					1.20					4 57
on	Gasconade	.18						T.	.30			.46	.12	.20								T.	T.		.41				1.35				3.02
e	Mississippi		.10						.32					.06								.30				T.			1.36	T.			2.14
onong	Black	.72							.65				.24								T.	.02	1.45						1.34				4.42
on	Osage	.45	T.			.05			.52				T.	.03								.05			.50				.83				2.43
ood	do	1.29						26	.90				.12					T.										T.					2.57
tain Grove	White	.07	.20						1.12				.08	.07									.20						.28				2.02
t Vernon	Neosho																																......
o	do	.57		.16	.03			1.40	.50			T.	.47						.17	.03			39	T.				.92					4.64
	Meramec	T.	.08			T.			.80				.04	.41							T.	.30							1.14	T.			2.77
gfield ***	White	.52	.01	T.				.37	.01			T.	.26					T.		.01		T.		.01				T.	T.				1.19
west Plain.																																
et	Osage	1.49		.16				62	.03			.44	.42																				3.16
ton City	do	1.72		.18				.74				.45	.02							T.					T.			.10					3 21
n	do	1.80						.57						.15																			2.52
sonville	do	.80	.03						1.05			.01	1.95								.03	T.				.12		.63	T.				4.62
r	Neosho	1.67			.25				.88			.09	.12						.03				T.										3 04
te	Missouri	1.90		T.				1.55					T.	T.	T.					T.	T				.50			1 54					5 49
all	do	.51		T.				.36				.05									T.				.03	T.		1.21	T.				2.16
la	Osage	1.10		.19				.55				.10	.37																				2.31
nsburg	Missouri																																......
w	Osage	2.00	.48		T.				.52				.86												.04				.76				4 66
rly	Missouri	.84	.05	T.				.03	.41				.04								T.		T.			.04		.32	.24				1.97
rest Plateau.																																
n	Grand										.30															.50		1.65					2.45
ny	do			T.			.04						.33							T.			T.			T.		1.05					1.42
othe	do												.50														.20	1.70	.50				2.90
ption	Missouri			.03				T.				.40	.21							T.								2.55	.07				3 26
n	Grand	.02						.13				.07	.62										T.			.04		1.13					2.01
City	do		T.					T.				.36	.22														T.	.94					1.52
s City***	Missouri	.40		.09				.82				1.24	.55												.07	.30		1.49					4.96
r	Grand	.05						.05	.07				.54												.02	.03		1.75	.15				2.66
gton	Missouri	.74	.10		.05			.21	.63				.58													.17		.88	.08				3.44
y	do	.60		.22				.90				T.	1.61												T.	.27		1.32					4.92
ville	do	.31						.02				.07	.98							T.								1.19	.15				2.72
n	do						.21					.17	1.16												.30			.90					2.74
eph***	Missouri			T.			T.	.56				.54	1.00		T.						T.				.11		.18	1.12					3.51
	do					.08					.80	1.25	1.90														.14	.38					4.55
on	Grand						.04					1.54			T.							T.				T.	.81	.18					2.57

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
of observation. ‡" Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
gular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
of fall not recorded

Evaporation from Standard Free Exposure at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mo.
vaporation (inches)	.151	.067	.119	.120	.175	.210	.184	.030	.153	.145	.135	.109	.125	.108	.136	.138	.147	.145	.134	121	.081	.158	.140	.098	.038	.125	.326	.065	.084	.075	....	3.842
ourly wind velocity surface of pan	0.8	0.5	0.5	0.4	1.0	1.1	1.1	0.4	1.0	1.0	0.8	0 8	1.1	0.6	1.7	1.5	1.5	1.6	1.1	1.1	1.4	1.2	1.6	0.8	0.9	1.1	2.7	1.2	2.2	0.9	....	1.1

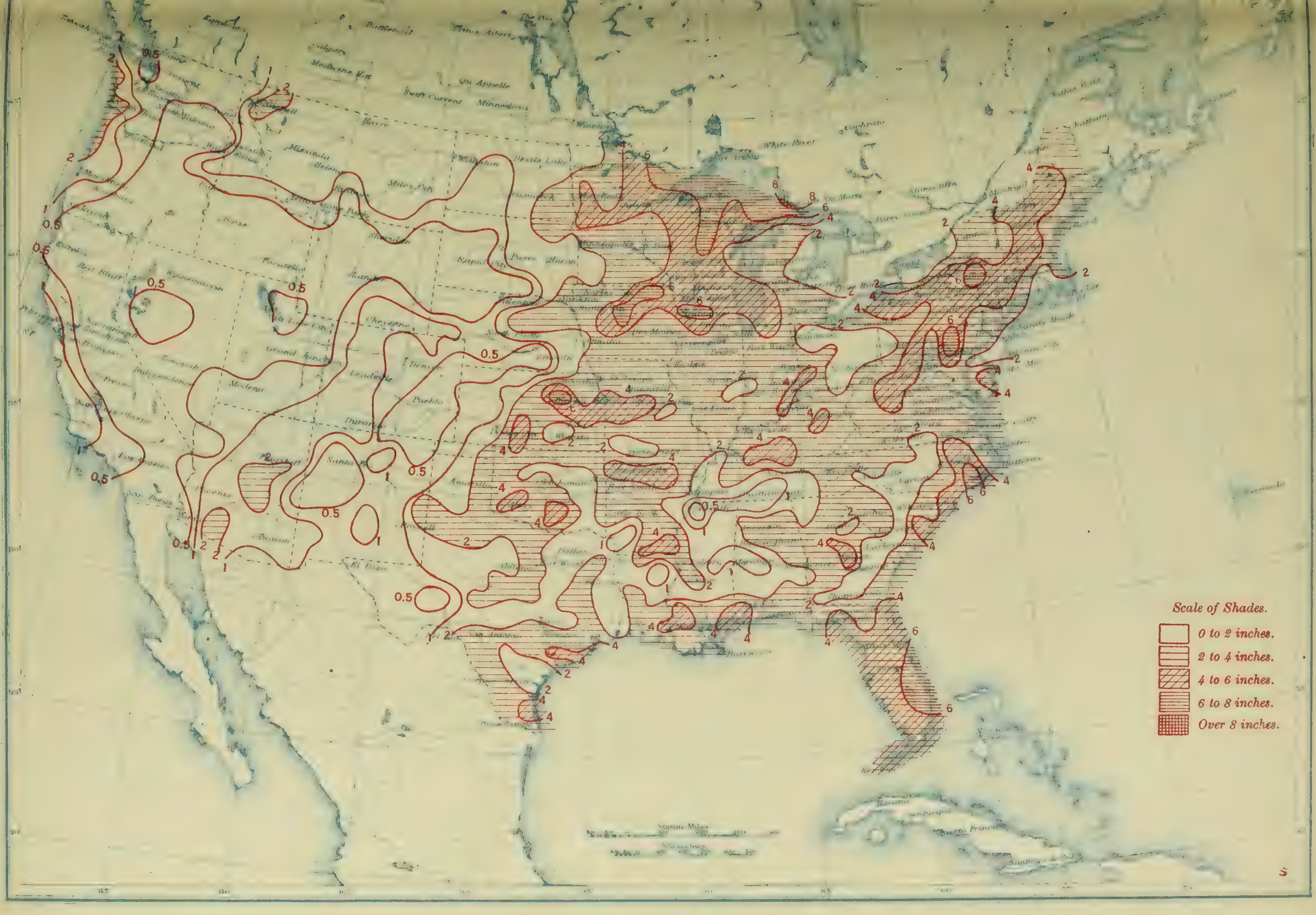
Daily temperatures for September, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	81	87	83	93	95	93	75	84	83	87	81	76	81	73	69	78	71	73	80	85	80	72	68	82	89	85	75	55	68	72
	Minimum	68	64	65	69	72	70	71	61	60	60	65	65	53	53	40	44	44	40	43	49	51	50	42	42	60	63	61	55	34	39
Columbia	Maximum	79	85	85	93	96	94	81	80	82	86	90	79	73	72	66	76	70	67	77	82	77	79	72	80	87	84	75	58	60	69
	Minimum	66	63	67	72	73	71	67	61	60	63	67	61	53	49	41	40	50	42	43	60	50	47	40	53	60	67	57	40	34	42
Fayette	Maximum	76	86	84	92	91	93	78	81	81	88	87	76	78	72	70	77	72	70	80	83	81	75	76	82	88	86	67	58	61	71
	Minimum	68	63	68	70	71	69	70	62	58	61	67	63	53	50	42	41	46	41	44	58	51	48	39	70	59	63	52	40	34	40
Hannibal	Maximum	80	86	85	91	94	93	82	80	80	83	90	79	72	70	64	75	65	66	73	85	77	66	72	80	85	86	77	58	61	65
	Minimum	66	63	65	73	73	68	69	63	60	63	66	61	56	51	42	39	48	38	40	60	51	52	41	45	59	58	58	42	33	41
Jefferson City §§	Maximum	79	86	85	92	91	91	85	85	85	88	93	80	74	75	67	75	77	70	80	87	82	75	76	84	90	88	88	57	62	70
	Minimum	65	63	64	67	71	70	73	66	57	58	65	67	57	52	41	39	42	43	42	43	55	55	44	45	55	67	67	56	34	39
Macon §§	Maximum	86	88	85	92	95	93	78	81	83	86	83	75	76	72	65	76	67	69	76	87	78	66	73	85	86	85	73	54	61	68
	Minimum	66	61	64	67	71	66	67	59	55	57	62	64	54	52	39	40	45	38	39	43	51	50	42	51	58	64	64	53	33	33
Mexico §§	Maximum	81	86	87	94	97	95	84	81	83	87	93	83	75	77	68	78	70	68	78	86	82	74	76	86	90	88	67	56	63	71
	Minimum	64	60	61	65	70	67	74	61	57	58	59	71	53	50	39	37	50	36	39	55	56	50	39	45	49	60	66	54	33	39
Oakfield	Maximum	74	83	87	93	97	97	94	79	82	87	89	78	70	81	66	76	68	66	75	82	79	75	75	85	90	90	89	65	61	66
	Minimum	64	65	62	69	71	68	68	66	60	60	68	69	58	51	42	39	49	42	44	51	56	55	42	51	58	63	64	48	35	38
St. Catharine	Maximum	83	86	84	90	93	91	84	81	83	86	82	76	78	72	65	74	69	68	75	84	80	68	72	80	79	82	79	66	60	67
	Minimum	65	60	60	69	71	67	68	56	68	61	63	64	51	50	37	39	45	37	45	55	48	46	37	56	59	64	59	46	35	42
St. Louis (1)	Maximum	74	83	85	90	94	93	91	78	80	84	85	79	76	77	64	72	67	64	72	79	76	73	71	77	86	86	83	65	59	63
	Minimum	66	65	67	69	73	71	66	67	63	64	70	66	63	55	49	49	53	48	52	54	61	56	51	56	61	67	65	46	41	45
Unionville §§	Maximum	86	90	86	92	95	91	86	88	87	88	86	82	81	74	71	80	73	76	72	84	80	68	74	84	89	84	74	64	68	74
	Minimum	64	60	61	63	70	65	66	54	53	56	60	62	50	53	38	36	40	34	38	46	50	46	36	38	46	52	60	50	31	36
Warrenton §§	Maximum	72	86	87	95	99	98	86	80	83	84	95	81	69	76	66	78	68	68	78	81	79	77	77	82	90	88	79	56	61	66
	Minimum	65	61	66	69	70	67	72	65	58	57	67	70	56	52	40	40	48	41	43	46	53	47	47	49	52	62	64	55	34	36
Southeast Lowlands.																															
Cardwell	Maximum	92	88	93	97	100	100	99	92	90	95	87	78	77	82	74	78	84	84	79	85	87	84	80	83	92	90	88	80	66	70
	Minimum	64	66	62	61	69	66	68	69	61	62	60	68	65	61	55	38	39	40	39	42	58	60	48	51	53	57	68	64	39	33
Caruthersville	Maximum	90	89	89	94	95	96	96	88	89	93	88	83	81	83	74	76	82	77	77	84	86	82	78	81	89	89	87	80	67	71
	Minimum	70	69	68	71	72	71	71	71	66	67	73	68	69	62	56	45	45	56	45	47	60	61	53	53	61	61	66	61	41	44
Doniphan	Maximum	81	85	90	95	97	98	98	87	85	90	85	84	77	71	81	75	75	82	73	75	84	80	80	79	86	87	84	78	63	65
	Minimum	64	67	70	62	71	84	80	70	60	64	68	70	68	64	62	53	37	61	51	39	54	58	46	51	55	67	74	63	39	34
Jackson	Maximum	80	84	89	95	97	98	98	83	84	90	88	83	86	78	73	75	84	76	78	81	80	84	80	78	92	89	94	80	63	67
	Minimum	60	68	61	62	72	68	70	60	59	58	68	70	63	60	50	36	40	48	34	42	55	55	39	43	48	55	68	54	39	34
Marble Hill	Maximum	75	85	89	95	96	98	96	92	88	90	85	80	70	80	72	75	84	72	70	80	80	82	78	75	87	89	85	82	66	70
	Minimum	66	70	64	62	70	72	72	70	60	58	65	70	65	50	50	37	40	40	36	42	62	59	41	45	49	57	68	52	38	35
Poplar Bluff §§	Maximum	96	83	96	89	95	97	98	96	87	92	94	82	78	72	80	74	77	85	77	79	84	87	82	78	78	88	89	85	70	58
	Minimum	58	65	63	62	61	69	69	69	61	61	64	69	69	60	52	40	40	44	40	45	46	45	46	46	50	53	58	62	38	35
Ozark Plateau.																															
Birchtree	Maximum	81	84	85	92	93	93	....	75	84	87	83	....	....	80	....	73	83	80	75	82	80	81	80	77	83	84	82	76	63	65
	Minimum	69	65	62	63	63	67	....	64	57	61	65	....	....	54	....	37	....	44	40	49	57	52	42	44	57	60	67	50	35	32
Cassville	Maximum	83	97	84	91	94	92	93	80	83	86	86	77	78	78	78	75	79	74	79	87	80	78	75	83	83	82	85	71	65	67
	Minimum	53	64	66	62	65	65	66	65	64	55	62	52	53	48	40	37	41	46	50	48	55	49	43	56	53	55	70	55	33	34
Eldon	Maximum	79	85	83	92	94	93	88	80	84	87	89	80	76	78	73	76	76	70	79	87	80	74	78	85	81	87	85	63	63	69
	Minimum	64	61	63	67	67	67	65	65	55	58	65	64	48	48	38	46	57	39	40	53	53	50	38	54	56	66	61	43	30	33
Fruit City	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gano	Maximum	81	86	89	92	96	97	98	80	82	89	85	73	72	76	65	76	80	68	78	81	78	78	75	85	88	87	88	65	61	67
	Minimum	66	61	61	66	69	69	66	64	55	52	64	67	56	51	42	36	50	48	46	50	55	51	40	50	58	62	65	47	34	34
Hollister	Maximum	80	88	90	98	98	98	96	90	92	90	88	84	82	80	76	80	80	82	84	88	86	84	82	86	86	88	86	68	76	74
	Minimum	64	60	66	72	74	76	72	64	64	62	64	68	64	52	50	42	48	50	52	50	54	50	46	46	44	48	54	52	48	50
Ironton §§	Maximum	77	86	87	91	94	95	94	84	84	88	84	75	67	81	69	75	83	71	75	81	79	79	78	83	89	88	85	64	63	67
	Minimum	59	61	59	59	67	66	68	67	50	52	59	70	60	56	45	29	37	44	28	43	60	50	36	41	49	53	68	56	36	29
Lebanon §§	Maximum	87	90	88	100	101	99	99	88	90	94	100	88	81	84	74	82	85	73	84	91	84	84	85	84	93	90	92	61	68	75
	Minimum	65	63	63	70	70	70	70	65	60	60	67	67	55	45	37	37	45	44	44	44	57	49	40	40	61	61	65	54	30	30
Mountain Grove §§	Maximum	78	87	85	93	95	93	94	86	84	86	85	75	75	80	68	72	81	74	74	86	79	78	80	81	87	80	86	62	63	63
	Minimum	67	62	62	63	67	68	70	65	61	62	66	68	60	47	43	41	46	48	45	48	53	56	42	48	56	61	60	55	34	36
Neosho	Maximum	86	87	87	94	95	93	95	81	88	84	90	81	76	74	68	76	78	73	77	83	83	78	74	81	80	80	80	68	60	77
	Minimum	68	64	66	67	69	68	67	61	58	57	65	65	50	48	39	40	46	42	50	58	54	48	43	59	58	60	65	54	30	36
Rolla §§	Maximum	79	86	88	97	99	98	93	84	84	89	86	74	75	78	67	77	79	71	79	85	80	75	79	86	90	88	86	57	64	86
	Minimum	63	61	62	68	70	70	71	63	57	58	59	66	58	50	42	39	44	45	39	40	56	52	43	42	57	62	67	54	33	33
Springfield	Maximum	82	85	83	89	92	91	92	82	83	84	86	74	76	74	65	72	76	71	74	86	80	74	76	83	84	81	85	62	62	64
	Minimum	66	66	66	68	69	71	65	64	61	62	70	63	56	52	42	45	54	48	49	56	57	52	47	61	62	66	62	43	35	43
Southwest Plain.																															
Amoret	Maximum	81	86	84	92	94	92	87	82	84	88	84	76	77	71	67	75	74	70	81	85	81	73	76	88	87	85	83	75	70	74
	Minimum	66	64	66	69	69	69	65	60	60	61	65	59	55	50	37	44	50	41	47	58	50	47	41	52	61	61	69	40	29	38
Clinton	Maximum	85	90	84	94	96	94	87	84	86	89	90	78	80	72	71	78	75	74	83	89	85	76	78	83	89	87	84	72	63	73
	Minimum	67	65	62	69	69	70	68	64	59	61	65	64	55	55	41	41	50	42	45	59	62	50	43	53	62	63	69	50	33	40
Harrisonville §§	Maximum	80	88	81	95	99	97	78	81	87	90	95	74	77	72	68	79	70	72	80	86	80	74	75	85	87	85	78	59	64	73
	Minimum	65	64	66	70	70	70	70	62	63	61	63	63	50	51	38	38	44	53	50	50	48	46	41	44	56	63	62	54	30	32
Lamar §§	Maximum	86	89	84	95	97	95	94	84	87	90	90	77	77	72	70	79	75	75	83	90	80	76	83	91	88	86	89	62	68	74
	Minimum	68	65	62	67	71	71	71	62	63	61	69	68	53	51	38	41	47	48	49	57	56	48	45	53	61	63	66	55	29	36
Lamonte	Maximum	82	87	85	91	92	93	83	73	75	78	74	71	71	65	63	71	73	75	78	85	79	78	76	84	82	78	79	60	65	75
	Minimum	66	67	66	71	73	71	67	65	66	63	56	50	44	41	35	37	41	39	43	60	63	45	34	47	48	41	49	45	29	37
Marshall	Maximum	80	87	83	91	94	92	83	82	82	86	84	75	79	....	68	77	71	69	77	83	80	72	74	81	86	84	78	68	63	70
	Minimum	67	62	64	70	70	69	69	62	56	58	67	64	52	....	37	37	49	40	40	60	56	45	37	49	67	69	61	49	31	38
Warrensburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	85	87	88	95	97	96	84	87	86	90	90	76	70	76	70	78	70	70	79	90	82	75	82	85	90	87	89	68	65	....
	Minimum	67	63	63	67	69	67	69	64	56	57	62	62	52	49	37	38	40	41	42	50	48	40	39	45	52	58	65	55	30	32
Northwest Plateau.																															
Avalon	Maximum	86	93	85	95	98	95	87	87	87	90	85	79	83	76	69	78	74	75	80	87	82	72	80	82	84	83	79	70	65	70
	Minimum	65	64	70	74	76	70	65	60	62	65	60	56	58	55	38	40	53	40	50	67	58	50	44	60	65	68	58	53	35	52
Grant City	Maximum	83	86	86	96	98	97	85	83	80	91	81	68	80	66	56	79	82	73	82	90	78	68	74	87	86	84	78	62	51	73
	Minimum	62	64	67	69	70	69	69	57	58	64	60	57	51	54	37	43	42	39	45	55	49	44	37	52	53	62	58	45	30	41
Kansas City	Maximum	79	84	77	92	95	93	82	79	84	87	83	72	75	66	67	74	66	68	79	85	77	70	73	81	83	83	75	60	60	72
	Minimum	66	66	69	72	73	72	67	63	61	65	64	58	59	52	46	48	50	48	51	63	57	53	49	54	64	65	60	44	39	45
Kidder §§	Maximum	83	90	85	98	97	96	78	85	88	90	83	74	80	68	67	78	69	74	80	87	80	70	78	82	86	84	75	57	62	74
	Minimum	65	65	64	67	71	68	69	57	57	58	60	64	53	53	37	37	46	41	42	46	48	41	42	44	52	61	58	47	32	32
Lexington §§	Maximum	80	86	82	92	95	92	73	81	84	86	83	74	80	71	68	75	71	70	78	85	80	73	75	83	85	83	77	58	61	70
	Minimum	66	62	67	71	71	72	70	61	60	61	64	66	55	53	40	43	52	39	46	61	52	48	39	52	63	64	62	54	32	40
Maryville §§	Maximum	82	87	85	97	99	95	78	83	86	89	67	69	80	64	64	78	66	73	79	85	75	65	76	82	85	81	70	54	58	72
	Minimum	62	59	59	68	69	69	67	55	55	57	58	54	48	48	36	36	40	36	38	46	47	44	36	36	50	59	55	44	28	32
Oregon	Maximum	80	86	84	91	95	92	84	78	82	87	80	69	76	64	62	75	80	69	75	80	75	65	71	76	82	80	80	64	60	70
	Minimum	62	63	66	69	69	71	66	56	59	65	59	53	51	48	37	41	50	41	47	63	46	42	40	50	61	62	56	44	30	45
St. Joseph	Maximum	84	89	83	95	97	95	76	82	85	89	78	70	79	64	65	78	68	71	79	87	76	68	74	83	85	84	72	58	61	73
	Minimum	67	63	69	73	74	75	66	60	63	66	63	56	52	49	41	48	46	42	51	62	52	48	41	53	64	67	58	41	33	45
Trenton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is char

the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
5

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

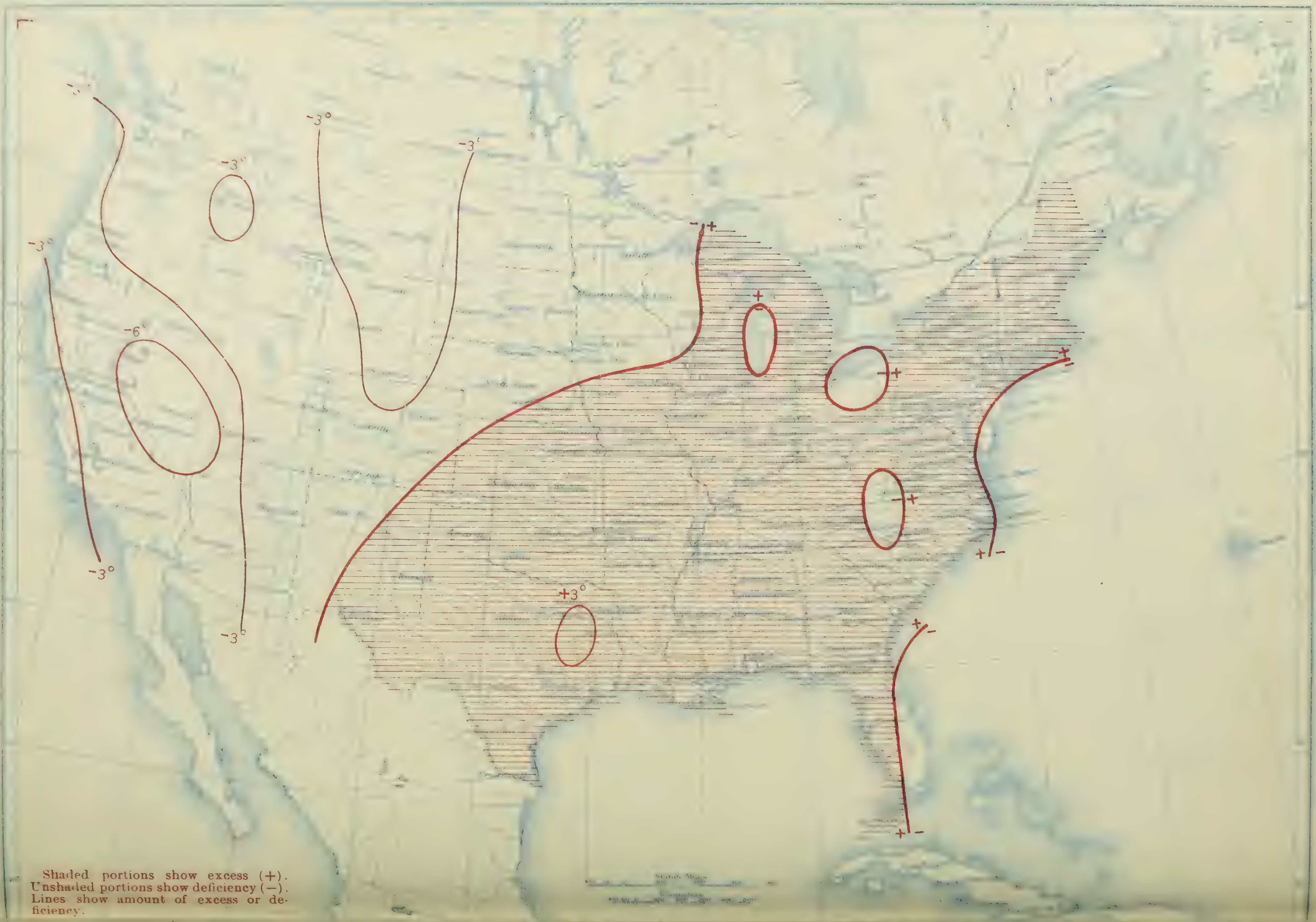
OCTOBER, 1916

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
NOVEMBER 20, 1916.

Departure of the Mean Temperature from the Normal, October, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

. XX. COLUMBIA, MO., OCTOBER, 1916. No. 10.

GENERAL SUMMARY.

'he outstanding features of the weather of October, 1916, e the mild and uniform temperatures, and large number of ght days. Fog perhaps formed oftener than is usual during month, but it was in fact largely meadow fog, or what the mans term *nebeltau*.

xcept in 18 or more counties extending from Jackson north- to Clark, the precipitation was considerably below the nor-. and in most sections grasses and fall sown grains suffered newhat from lack of moisture. In most of the northern nties, however, wheat was looking well, but south of the souri River continued droughty conditions delayed prepa-on of the ground, and germination of grain. Because of drought in the southern half of the State much of this rs' corn land has been put to wheat, the only preparation le was with the harrow preceding the drill. Corn cribbing le good progress but there is still much in the shock.

'astures were getting short, and stock water was becoming ce. In Reynolds, Shannon, Carter, Oregon, Texas, and ral other adjoining counties family drinking water was be- hauled from distant places.

TEMPERATURE.

'he monthly mean temperature, 64 stations reporting, was [illegible]. The mean departure from the normal for 64 stations ing 10 or more years' record was plus 0.7°. There were a cool days during the latter part of the second decade and first of the third decade, but throughout practically the en- month the weather was markedly pleasant. During the t seven or eight days maximum temperatures ranged gener- between 80° or 90°, and even rose above the latter value the 5th, 6th, 7th, and 8th. Minimum temperatures of 32° lower occurred in the northwest plateau on the 20th and in remainder of the State on the 21st, the lowest being 20° at gon, and Tarkio, in the northwest plateau.

PRECIPITATION.

'he average precipitation, 75 stations reporting was 2.17 hes. The departure from the normal for 66 stations having or more years' record was minus 0.54 inch. In about 18 20 counties, situated partly in the northwest plateau, and theast plain, extending in a general way from Jackson theast to Clark, the precipitation of the month ranged be-en 3 and 4 inches; in the remainder of the State it was less n 2 inches, while about 11 or 12 counties in the Ozark pla-u received considerably less than 1 inch. There was but le precipitation during the first 8 or 10 days, and it occurred y occasionally during the last week. The heaviest and most eral precipitation fell on the 15th, 19th, 20th, and 24th. w to appreciable measurements fell in most northern, cen-l, and western counties on the 20th, but melted soon after ing.

The average number of days with 0.01 inch or more precip-ion was 6.

EVAPORATION.

The total evaporation from standard free exposure at Colum- . Mo., was 2.454 inches, or about 1.39 inches less than the ceding September. The average hourly wind velocity at the face of the pan was 1.5 miles, a little greater than the preceding month. The total precipitation, (7 a. m. September 30 to 7 a. m. October 31), was 1.55 inches, 2.88 inches less than in September.

WIND.

The prevailing winds were from the south. The total number of miles, 8 stations equipped with anemometers reporting, was slightly above normal; the average hourly velocity was about 1 mile above normal. Quite strong winds, in advance of the cold snap, prevailed generally on the 20th.

SUNSHINE AND CLOUDINESS.

The month experienced about the usual number o bright days. The average number of hours of sunshine, 6 regular stations reporting, was 214, or about 66 per cent of the possible, and 4 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fog—October 9th, 14th, 15th, 16th, 17th, 19th, 24th, 26th, and 30th.
Frost, killing—October 19th, and 20th.
Halos, lunar—October 10th, 11th, 13th, and 18th.
Halos, solar—October 1st, 9th, 13th, 14th, 18th, 23d, 28th, and 29th.
Thunderstorms—October 19th, 24th, 29th, 30th, and 31st.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.07	76	......	217	63	5,684	7.6	30	w.	20
Hannibal	30.08	81	......	......	......	6,479	8.7	30	w.	25
Kansas City	30.05	73	59	227	66	8,828	11.9	37	nw.	20
St. Joseph	30.04	74	54	206	60	6,255	8.4	38	nw.	20
St. Louis	30.08	76	60	232	67	9,575	12.9	44	w.	30
Springfield	30.08	71	53	203	58	8,194	11.0	37	nw.	20
Cairo, Ill	30.09	......	......	......	......	5,482	7.4	36	sw.	20
Keokuk, Iowa	30.07	80	69	202	58	5,622	7.6	28	w.	20

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	53.6	−3.5	89	24	2.65	+0.21	.....	.....	7	....	....	....
1889	53.8	−3.3	91	27	2.50	+0.06	.....	.....	6	....	....	....
1890	54.8	−2.3	91	22	2.24	−0.20	.....	.....	6	....	....	....
1891	55.7	−1.4	98	19	1.11	−1.33	.....	.....	3	....	....	....
1892	57.5	+0.6	95	16	2.28	−0.16	2.40	0	5	16	7	8
1893	56.7	−0.4	95	16	0.99	−1.45	2.81	....	10	20	8	3
1894	57.6	+0.5	94	18	1.74	−0.70	3.52	T.	6	17	8	6
1895	51.2	−5.9	89	15	0.35	−2.09	1.20	T.	2	21	6	4
1896	54.1	−3.0	90	19	2.48	+0.04	2.68	0	5	19	6	6
1897	62.5	+5.4	99	23	0.71	−1.73	1.70	0	3	22	6	3
1898	53.5	−3.6	94	19	4.23	+1.79	4 51	1.4	8	11	7	13
1899	62.4	+5.3	100	24	2.93	+0.49	2.53	0	5	20	6	5
1900	62.4	+5.3	92	25	4.18	+1.74	4.04	0	7	17	7	7
1901	60.1	+3.0	96	24	1.64	−0.80	2.98	0	6	18	8	5
1902	59.5	+2.4	88	23	2.52	+0.08	2.69	0	5	21	5	5
1903	57.2	+0.1	90	19	2 85	+0.41	3.80	0	6	19	6	6
1904	57.6	+0.5	90	19	0.90	−1.54	2.46	0	3	20	7	4
1905	55 1	−2.0	90	20	4.64	+2.20	7.24	0.3	5	17	6	8
1906	56.3	−0.8	94	17	0.87	−1.57	1 55	0	10	15	7	9
1907	56.7	−0.4	94	18	2.90	+0.46	3.46	0	7	19	5	7
1908	56 3	−0.8	92	21	2.74	+0.30	4.90	0.8	5	18	6	7
1909	57 2	+0.1	95	20	2.77	+0.33	2.57	T.	6	19	5	7
1910	59.4	+2.3	94	15	2.71	+0.27	5.50	0	5	22	4	5
1911	56.9	−0.2	96	25	3.30	+0.86	5.12	0.2	8	11	7	13
1912	59.1	+2.0	97	21	3.83	+1.39	5.12	0.7	....	20	5	6
1913	54.7	−2.5	93	11	4.46	+1.94	2.80	3.3	9	15	6	10
1914	59.2	+2.0	88	19	4.54	+2.04	5.40	0	7	14	6	11
1915	59.8	+2.6	95	22	1.19	−1.45	1.97	0	3	23	5	3
1916	58.0	+0.7	95	20	2.17	−0.54	3.90	0.3	6	18	5	8

Climatological data for October, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	600	39	...	...	...	...	...	...	...	2.66	−0.11	0.94	0	6	18	2	11	se.	C. Randecker.
Brunswick	Chariton	652	36	56.9	+0.3	91	6†	25	21	39	4.22	+1.36	2.80	0.5	9	15	2	14	s.	Louis Benecke.
Clifton Hill	Randolph	731	...	58.0	...	91	5	23	21	36	3.61	...	2.30	0	9	16	9	6	...	L. S. Harlan.
Columbia	Boone	784	26	58.0	+3.2	89	8	25	21	33	1.55	−0.87	0.60	T.	7	14	6	11	se.	U. S. Weather Bureau.
Fayette	Howard	725	31	56.6	−0.4	90	5	23	21	33	2.49	+0.06	0.84	T.	7	...	...	...	...	Prof. T. B. Smith.
Fulton	Callaway	818	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Dr. C. W. Knapp.
Gorin	Scotland	700	27	...	...	...	...	...	...	...	2.95	+0.67	1.90	0.5	7	15	4	12	se.	J. W. Pulham.
Hannibal	Marion	534	23	55.8	−0.1	88	8	24	21	37	1.59	−0.05	0.92	1.8	9	18	2	11	sw.	U. S. Weather Bureau.
Hermann	Gasconade	482	42	...	...	...	...	...	...	...	2.34	−0.34	1.30	0	7	14	5	12	e.	C. T. Mansfield.
Jefferson City	Cole	628	30	58.4	+1.8	90	4†	25	21	46	1.21	−1.08	0.42	T.	8	18	5	8	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	...	...	...	...	...	...	...	3.49	...	2.75	T.	8	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	500	38	56.8	+1.0	90	8	24	21	44	1.82	−0.45	0.65	1.2	7	20	6	5	sw.	J. T. Farrell.
Macon	Macon	881	18	54.4	−3.1	88	8	23	21†	51	3.26	+0.48	2.63	T.	8	15	7	9	sw.	John A. Cook.
Mexico	Audrain	797	38	56.0	−0.5	91	8	24	21	42	1.95	−0.27	0.89	0.5	6	17	0	14	...	J. I. Llewellyn.
Oakfield‡‡	Franklin	793	24	59.8	+1.0	90	5†	26	21	36	1.73	−1.13	0.82	0.5	5	11	14	6	s.	E. E. Steines.
Palmyra	Marion	652	4	58.6	+1.2	87	8	23	21†	47	2.11	+0.13	1.64	2.5	6	14	6	11	se.	W. B. Markell.
St. Catherine	Linn	914	3	55.7	...	87	8	21	21	34	3.71	...	2.33	1.0	8	16	7	8	s.	L. D. Baker.
St. Charles	St. Charles	614	38	58.7	+1.0	90	5	27	21	39	1.47	−0.95	0.65	T.	5	15	10	6	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	59.2	+0.8	86	7	30	21	27	1.64	−0.77	0.68	0.1	8	16	8	7	s.	U. S. Weather Bureau.
St. Louis (2)	do.	578	4	58.0	...	87	5	29	21	33	1.60	...	0.41	0.1	8	19	6	6	se.	St. Louis University.
Steffenville	Lewis	576	23	56.8	−0.4	92	5†	21	21	39	2.95	+0.85	1.90	1.5	6	12	11	8	s.	Frank Hall.
Unionville	Putnam	1,072	23	55.2	+0.1	91	8	20	21	40	3.25	+1.05	1.90	2.0	8	16	3	12	s.	Geo. W. Davis.
Warrenton	Warren	865	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Prof. J. H. Frick.
Section means and extremes			...	57.2	+0.4	92	5†	20	21	51	2.46	−0.08	2.80	0.6	7	16	6	9	s.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D. L. Albert.
Cardwell††	Dunklin	225	5	61.1	...	94	7	28	22	45	2.10	...	0.80	0	4	25	4	2	sw.	F. E. Tate.
Caruthersville	Pemiscott	220	25	63.0	+2.4	92	7†	31	21	44	2.67	+0.06	1.10	0	4	25	4	2	e.	H. E. Averill.
Doniphan	Ripley	440	11	59.7	+2.0	87	7	28	21	43	1.18	−1.81	0.85	0	3	21	8	2	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	58.9	+1.8	93	7	28	21†	47	3.74	+0.79	1.10	0	4	16	9	6	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	60.4	+2.9	90	7†	29	21	50	2.55	+0.16	0.70	0	6	19	8	4	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	...	...	...	...	...	...	...	2.92	−0.42	1.10	0	5	19	3	9	se.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	...	...	...	...	...	...	...	1.54	...	0.50	0	4	25	0	6	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	59.2	−0.8	92	8	26	21	47	2.04	−0.79	1.35	0	4	19	7	5	...	Miss Belle Kinne.
Sikeston	Scott	328	15	...	...	...	...	30	21	44	1.71	−0.75	1.24	0	3	24	5	2	s.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	60.6	+1.5	89	7	34	21	31	1.29	−1.34	0.88	0	4	17	9	5	n.	U. S. Weather Bureau.
Section means and extremes			...	60.3	+1.6	93	7	26	21	50	2.18	−0.51	1.35	0	4	20	6	5	s.	
Ozark Plateau.																				
Arlington	Phelps	695	14	...	...	...	...	...	...	...	1.20	−1.02	0.45	0	7	18	2	11	se.	G. V. Randolph.
Bagnell	Miller	594	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Mrs. Nellie V. Houser.
Birchtree	Shannon	1,200	22	60.1[c]	+2.1	89	5†	26	21	42	0.48	−2.07	0.28	0	3	27	2	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	58.4	−0.1	83	8†	25	21	39	1.47	−1.26	0.60	T.	7	19	7	5	sw.	A. C. Fink.
Cassville	Barry	1,500	5	57.7	...	86	8	24	21	48	1.63	...	1.05	0	6	21	3	7	s.	Mrs. Zuma Bloomer.
Crocker††	Pulaski	1,300	5	62.2[a]	...	84	7†	28	20	42	0.75	...	0.62	T.	2	29	0	2	...	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	59.6	−0.6	91	8	22	21	48	2.67	−0.35	1.55	0	6	22	1	8	ne.	H. E. Dean.
Eldon	Miller	934	15	58.4	−0.2	90	5†	23	20	42	0.97	−1.79	0.40	T.	4	14	8	9	sw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	60.4	...	84	27	32	20	48	0.82	...	0.30	0	4	21	8	2	e.	R. C. Walton.
Gano‡‡	Dent	1,250	12	58.8	+0.8	91	7	22	21	42	2.85	−0.89	2.15	T.	5	23	3	5	s.	A. C. Leach.
Goodland	Iron	1,000	11	56.4	+0.7	87	7	26	21†	49	2.07	−1.75	1.03	0	4	23	3	5	s.	F. M. Adams.
Hollister	Taney	1,000	7	60.2	−0.1	92	6†	30	20	50	0.60	−2.51	0.40	0	3	26	0	5	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	59.5[a]	+2.5	85	7	25	21	40	0.79	−1.68	0.33	T.	3	24	2	5	s.	R. F. Harmon.
Ironton	Iron	925	38	56.8	+0.9	89	6†	23	26	52	1.20	−1.47	0.60	T.	6	12	12	7	n.	W. H. Delano.
Koshkonong	Oregon	911	15	61.0	+1.2	90	7	26	21	38	0.98	−1.73	0.43	0	3	17	12	2	s.	R. M. Hitt.
Lebanon	Laclede	1,265	27	59.0	+0.5	91	7	23	21†	49	1.55	−1.08	0.95	T.	7	21	6	4	s.	Leonard E. Dickerson.
Lockwood	Dade	1,088	21	60.6	+2.6	90	7†	25	21	40	1.84	−1.19	0.85	T.	5	20	2	9	se.	C. S. Crow.
Mountain Grove	Wright	1,490	17	58.6	+1.1	91	5	24	21	49	0.82	−2.06	0.28	T.	5	13	10	8	s.	Mo. Fruit Exp. Sta.
Mount Vernon‡‡	Lawrence	1,480	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	J. R. White & Son.
Neosho	Newton	1,083	33	57.4	−1.9	84	8†	23	21	38	1.46	−1.72	0.70	T.	7	24	2	5	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	59.0	+3.8	91	6†	23	21	63	1.35	−1.09	0.50	1.0	5	20	8	3	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	59.4	+2.1	87	5	27	21	32	1.24	−1.56	0.95	T.	6	17	5	9	se.	U. S. Weather Bureau.
Section means and extremes			...	59.0	+1.0	92	6†	22	21	63	1.37	−1.48	2.15	T.	5	20	5	6	s.	
Southwest Plain.																				
Amoret	Bates	850	7	59.2	...	93	8	24	21	39	1.87	...	0.78	T.	5	19	2	10	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	60.0	+1.0	90	4†	24	21	36	2.18	−0.07	0.65	T.	8	15	9	7	se.	W. G. Bigelow.
Clinton	Henry	800	29	59.8	+1.4	92	8	26	20	43	2.20	−0.17	0.80	0	4	16	7	8	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	56.4	+0.3	90	4†	24	21†	49	2.92	+0.34	1.70	0.5	7	12	1	18	sw.	A. J. Sharp.
Lamar	Barton	964	35	60.6[a]	+1.8	95	5	24	21	41	1.35	−1.66	0.71	T.	5	21	0	10	se.	Dick B. Houston.
Lamonte	Pettis	863	27	57.6	...	92	6	23	21	44	2.05	−0.05	0.90	T.	4	13	10	8	s.	J. Ed. Hall.
Marshall	Saline	779	25	56.6[a]	−0.4	90	8	21	21	37	2.27	−0.16	0.91	T.	5	18	9	4	s.	Prof. W. H. Black.
Nevada	Vernon	860	22	60.2	...	91	5	24	21	43	1.48	−1.13	0.46	0	8	19	5	7	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	59.3	+1.1	94	8	25	21	41	3.56	+1.01	1.34	T.	8	16	7	8	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	59.3	+1.1	93	8	21	21	50	1.94	−1.68	0.48	2.0	10	16	12	3	sw.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	...	...	...	...	...	...	...	4.44	...	2.59	0.2	7	17	3	11	sw.	John W. Cauthorn.
Section means and extremes			...	58.9	+0.9	95	5	21	21	50	2.39	−0.40	2.59	0.2	6	17	5	9	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	59.8	+1.8	90	5†	27	20†	33	4.30	+0.71	3.90	0	4	17	7	7	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	55.2	+1.0	91	4	22	21	42	1.57	−0.86	0.72	T.	7	14	7	10	se.	M. H. Moulton.
Chillicothe	Livingston	...	1	...	...	...	...	...	...	...	3.01	−1.22	2.35	0	5	17	2	12	...	Hocey O. Dupy.
Conception	Nodaway	982	31	53.2	−2.2	88	4	21	20	36	1.67	−0.92	0.88	T.	5	17	7	7	se.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	...	...	...	...	...	...	...	2.42	−0.19	1.41	0.5	7	16	4	11	s.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	5.46	0.6	91	4	22	21	40	1.68	−1.11	0.75	0	6	20	0	11	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	57.4	+1.6	88	8	26	20	30	4.17	+1.96	3.26	T.	11	16	5	10	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	55.6	−0.7	90	8	24	21	38	2.39	−0.33	1.50	1.0	8	16	4	11	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	57.4	−0.2	90	8	26	21	37	3.91	+1.33	2.75	T.	5	19	0	12	s.	J. W. Keithley.
Liberty	Clay	864	27	59.2[h]	+1.8	89	5†	23	21	39	4.86	+2.67	3.10	0	9	14[g]	6[g]	4[g]	se.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	52.0	−1.6	86	7	20	21	42	1.76	−0.65	0.96	2.0	3	17	5	9	s.	J. R. Brink.
Oregon	Holt	1,113	60	51.1	0.5	85	4†	20	20	35	1.70	−0.90	0.87	T.	4	14	10	7	s.	Tom Curry.
St. Joseph	Buchanan	967	41	56.1	...	89	8	24	20	36	1.78	−0.81	0.87	T.	7	16	6	9	se.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	55.6	...	89	4	20	20	38	1.75	−0.80	0.72	2.0	6	20	4	7	sw.	John F. Frazier.
Trenton	Grundy	812	21	55.2	−1.3	86	8	21	21	31	2.18	−0.46	1.41	T.	8	18	2	11	s.	W. H. Estes.
Section means and extremes			...	55.8	0.1	91	1	20	20†	42	2.61	−0.11	3.90	0.2	6	17	5	9	s.	
State means and extremes			...	58.0	+0.7	95	5	20	20†	63	2.17	−0.54	3.90	0.3	6	18	5	8	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.F. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for October, 1916.

Stations.	Watersheds.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
east Plain.																																	
	Missouri															.94	.56			.32	.14					.68				T.	.02		2.66
ck	Grand									.04				.11		.10	.54			.11	.27				.22	2.80					.03		4.22
Hill	Chariton									.03			.04			.40	.04		.02	.20	.05				2.30	.53							3.61
ta***	Missouri									T.			T.		.16	.53	.19		.08	.25	T.			T.	.33				T.	.01			1.55
	do												.10			.56	.46		.22	.27					.84					.04			2.49
	do																																....
	Mississippi									.04			.26			.21			.10		.42				1.90					.02			2.95
al***	do									.01			.05		.02	.19			.02	.23	.15			T.	.89	.03				T.			1.59
n‖	Missouri													.14		.43	.04			.24	.15					.04						1.30	2.34
n City ‖	do													.07		.42	.05			.15	.25				.05	.10						.12	1.21
lle	Chariton									.05			.02			.27		.15	T.	.15	.09				2.75					.01			3.49
na	Mississippi								T.	T.			.01			.65	.28		.12	.31	.25				T.					T.		.20	1.82
	Chariton									T.	.03		T.	.15		.08	.06			.12	.17	T.				2.63	T.			.02			3.26
‖	Mississippi									T.	T.			.01		.55	.89	T.		.04	.20					.26							1.95
	Meramec												T.			.36	.04		.08	T.	.43										.82		1.73
a‖	Mississippi									.02						.18	.04			.08	.15				T.	1.64							2.11
rine	Grand									.10			.19			.07	T.		T.	.26	.10				2.33	.59				.07			3.71
les	Missouri								.12				T.			.45			.13	.12	T.											.65	1.47
s (1)***	Mississippi									T.			T.		.07	.22	.01		.33	.27	.05					.01				T.	.68		1.64
s (2)	do									T.			.01		.11	.28	.02		.36	.41	.02				T.	T.					.39		1.60
lle	do									T.			.30			.30			.10	.12	.23				1.90								2.95
lle	Grand									.34				.20		.06	.20			.04	.45				1.90					.06			3.25
ton	Mississippi																																....
east Lowlands.																																	
ardeau	Mississippi																																....
	do									.30									.80	.70	.30												2.10
sville	do								T.	.60				T.			T.		1.10	.27	.70											T.	2.67
an	Black								T.						T.				.85	.13	.20												1.18
	Mississippi																1.10	1.10	.81												.73		3.74
Hill	do																.04		.70	.40	.60										.25	.56	2.55
drid	do																	.31	.91	1.10	.40											.20	2.92
near	do														.44				.50	.40										.20			1.54
Bluff	Black															T.		.03	.11	1.35	.55											T.	2.04
	Mississippi																		1.24	.20	.27												1.71
ll***	do													T.	T.	T.			.88	.18											.06	.17	1.29
Plateau.																																	
	Gasconade													T.		.45	.11	.06		.16	.15	.06									.21		1.20
	Osage																																....
	Black								.12										.28	.08													0.48
	Osage												.20	.09		.60			.08	.12						.18			.20				1.47
	White												.15	.10	.20	1.05	.03		T.	.10													1.63
	Gasconade															.62				.13	T.												0.75
	Neosho												.20	.35	.28	1.55			.13	.16				T.									2.67
	Osage												.05			.40				.36						.16							0.97
ity	Black																T.		.30	.06	.26										T.	.20	0.82
	Meramec															2.15			.09	.11	.08										.42		2.85
nd	Black															1.03			.15		.44											.45	2.07
	White									.10				.40		.10																	0.60
	Gasconade												T.	T.	T.	.33	T.		.17	T.	T.									T.	.29		0.79
	Mississippi									.02	T.		T.	T.		.20				.45	.15					T.				T.	.33	.05	1.20
ong	Black								.30				T.			T.	T		.43	.15													0.98
	Osage													.28		.95	.11		T.	.07	.05					.06				.03			1.55
d	do												.38		.08	.85			T.		.32					.21							1.84
ain Grove	White									T.				.16		.06	.11			.21											.28		0.82
Vernon	Neosho																																....
	do											T.	.15	.04	.17	.70			.10	.10	T.				T.	.20							1.46
	Meramec													T.		.48	.14	.04		T.	.19					T.					.50		1.35
eld***	White									T.		T.	.09		.25	.70			.07	.07	T.				.06				T.				1.24
west Plain.																																	
t	Osage											T.	T.		T.	.65	.11			.30				T.	.78					.03			1.87
on City	do											.03	.03	.65		.47	.04		.01	.48					.47					T.			2.18
	do															.65	.25			.80						.50							2.20
nville ‖	do												T.	.04		.47	.13				.47				.09	1.70				.02			2.92
	Neosho													.12		.71	T.			.10	.08					.34				T.			1.35
te	Missouri							T.		T.			T.		T.	.60		T.	T.	.35	.20				.90				T.	T.			2.05
il	do									T.			T.			.76	.21			.19	.20			T.	.91						T.		2.27
	Osage												.14	.07	.35	.17	.06			.20						.46				.03			1.48
sburg	Missouri											T.	T.			1.02	.64		.03	.41	.05				.63	.71				.07			3.56
	Osage		T.									.03	.06	.14	T.	.42	.16		.03	.48	.22			T.	T.	.38				.02			1.94
y	Missouri												T.			.18	1.12			.02	.35				.15	2.59				.03	T.		4.44
west Plateau.																																	
	Grand									.15						.25									3.40	.50							4.30
	do									.09			.04			.10				.25	T.				.72	.20			T.	.20			1.57
the	do										.15					.14	.02				.35					2.35							3.01
tion	Missouri												.04			T.				.40					.88				.06	.29			1.67
	Grand									.14			.05			.11	T.			.37	.09				1.41					.25	T.		2.42
ity	do									T.			.10			.15	T.				.35			T.	.75	.11				.22	T.		1.68
City***	Missouri									.02			.03		.14	.08	.01			.56				.03	3.26				.02	.01	.01		4.17
	Grand									T.	.12			.02		.07	.10				.40					1.50				.15		.03	2.39
ton	Missouri									.06						.15	.45				.56					2.75							3.97
	do									.06			.12			.87	.10			.57	T.			T.	3.10				.02	.01	.01		4.86
	do		T.											T.		T.	T.				.50					.96				.30			1.76
	do												T.			.05				.52				T.	.87				.26				1.70
ph***	Missouri	T.							T.	.16			.09		.06	.05				.42					.87				.13				1.78
	do		.01													.20				.35					.72				.21	.26			1.75
	Grand	T.							.04	.05			.08		.05	.03				.33					1.41				.19				2.18

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. lar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate fall not recorded

Evaporation from Standard Free Exposure at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mo.
evaporation (inches)	.137	.123	.163	.135	.135	.114	.083	.121	.108	.075	.088	.076	.055	.120	.071	.011	.049	.100	.022	.025	.004	.083	.096	.037	.007	.081	.074	.090	.130	.072	.049	2.454
rly wind velocity surface of pan	1.4	1.5	1.7	1.5	1.1	1.0	0.8	0.8	1.3	1.9	1.2	1.0	2.1	1.5	1.0	0.9	1.3	2.2	1.2	3.4	3.2	1.5	1.7	1.5	2.4	2.1	1.9	1.0	1.7	1.7	1.2	1.5

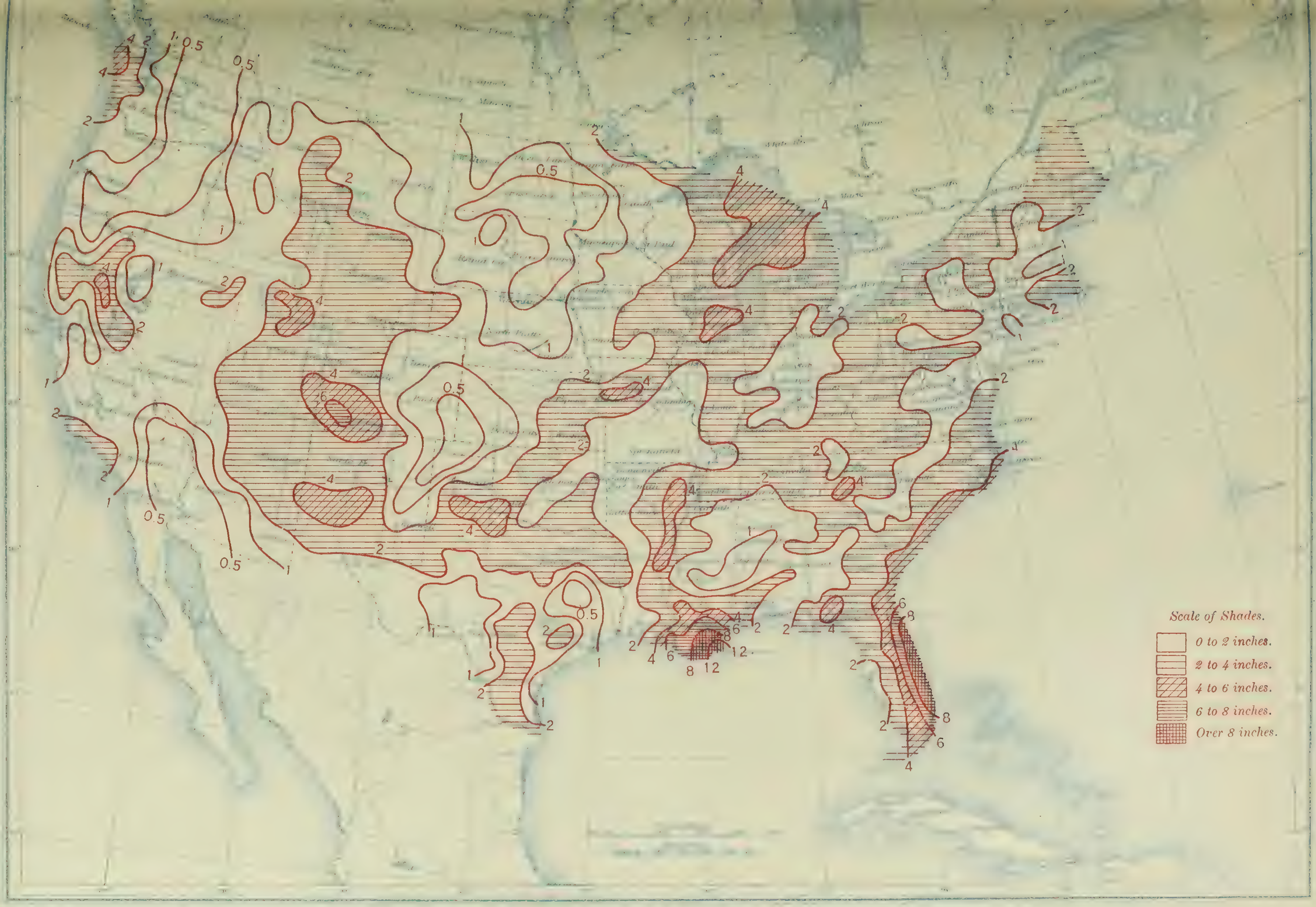
Daily temperatures for October, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	71	80	85	89	89	91	91	91	55	65	65	72	74	74	60	66	64	59	52	40	60	75	57	52	55	69	75	75	69	70	68
	Minimum	45	48	56	57	56	54	52	58	52	37	37	45	52	41	45	35	40	40	41	28	25	26	40	45	46	35	38	43	54	48	38
Columbia	Maximum	70	80	84	88	87	84	88	89	71	60	61	75	68	71	60	67	60	56	54	39	56	73	61	65	54	68	73	76	70	71	66
	Minimum	46	52	53	60	55	54	60	65	44	38	39	53	49	40	53	57	42	41	32	28	25	41	46	47	40	35	48	55	53	48	41
Fayette	Maximum	73	82	86	89	90	83	88	89	66	60	64	73	68	73	60	67	61	55	54	38	56	63	57	52	54	67	75	77	70	68	66
	Minimum	45	48	55	60	57	52	58	51	42	36	38	52	48	40	52	54	40	40	31	27	23	37	45	40	40	34	41	56	52	48	41
Hannibal	Maximum	69	76	80	84	87	80	87	88	68	59	65	73	66	67	56	67	58	51	58	34	53	70	61	64	54	66	68	76	70	62	62
	Minimum	45	51	53	55	50	55	57	64	45	38	34	54	41	36	52	51	42	40	34	30	21	38	40	48	38	54	45	50	47	46	46
Jefferson City §§	Maximum	75	81	86	90	90	88	90	90	58	59	67	78	70	74	63	76	63	59	55	40	57	74	66	77	56	70	74	77	77	74	64
	Minimum	42	49	53	54	51	54	51	57	56	38	39	43	57	40	48	54	43	44	46	29	25	28	44	48	42	33	40	48	54	46	44
Macon §§	Maximum	72	79	83	86	87	80	87	88	55	59	64	73	69	69	57	67	61	53	54	34	56	71	53	52	53	64	73	76	68	59	62
	Minimum	42	47	49	49	53	52	53	62	52	34	34	39	50	40	43	52	36	36	37	28	23	23	40	40	39	33	38	44	50	45	40
Mexico §§	Maximum	72	80	85	89	89	81	90	91	56	60	64	78	69	72	59	68	60	55	55	36	54	72	63	65	56	67	73	78	75	66	64
	Minimum	40	47	48	50	49	51	51	61	55	33	33	36	52	34	41	54	38	37	47	30	24	38	40	43	40	32	47	47	52	41	39
Oakfield	Maximum	72	78	82	86	90	88	90	90	75	60	67	80	72	72	64	78	67	54	57	48	53	71	74	76	65	68	78	79	80	77	65
	Minimum	41	52	50	53	56	55	61	64	47	37	39	48	57	43	50	55	43	44	46	30	26	36	43	54	43	32	48	50	52	47	45
St. Catharine	Maximum	71	78	83	85	85	77	85	87	80	58	63	67	66	68	60	69	66	63	56	40	55	68	65	52	53	63	71	76	65	56	63
	Minimum	46	51	56	59	56	51	58	58	47	33	36	50	50	41	52	53	35	40	40	26	21	37	38	43	38	32	40	49	50	43	34
St. Louis (1)	Maximum	68	74	79	81	84	82	86	84	72	59	65	78	69	68	59	75	60	53	58	39	51	65	68	73	62	64	71	75	75	74	64
	Minimum	45	50	54	57	62	60	65	67	48	42	46	54	55	48	52	55	46	45	38	31	30	38	45	53	45	40	52	54	54	50	50
Unionville §§	Maximum	76	80	84	82	84	82	88	91	60	66	70	76	70	72	66	72	68	72	56	34	60	55	54	55	56	60	70	74	64	60	65
	Minimum	43	45	50	60	56	54	58	60	49	29	33	45	44	40	46	50	30	32	40	28	20	24	36	40	39	34	40	42	50	42	40
Warrenton §§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Southeast Lowlands.																																
Cardwell	Maximum	77	80	84	86	90	91	94	90	91	74	71	80	78	80	85	83	73	67	67	63	55	69	74	78	68	74	79	80	79	81	73
	Minimum	34	40	40	44	45	55	55	62	60	43	43	42	38	54	52	58	54	49	54	36	29	28	30	40	50	37	35	37	39	47	50
Caruthersville	Maximum	76	66	81	86	89	90	92	86	92	68	73	81	81	75	86	82	78	60	65	62	58	69	73	78	65	68	81	82	81	82	75
	Minimum	43	47	47	52	55	59	60	66	60	47	44	47	60	50	58	66	60	52	56	37	31	33	38	44	53	34	38	38	48	50	56
Doniphan	Maximum	72	73	79	81	84	85	87	86	83	64	66	80	76	70	85	79	73	61	67	65	55	65	71	73	66	65	77	76	76	78	74
	Minimum	31	42	42	43	45	56	56	63	58	46	38	43	62	47	55	62	56	47	53	35	28	30	35	43	48	30	34	38	40	51	54
Jackson	Maximum	74	77	83	85	90	91	93	88	80	69	70	81	77	74	79	77	75	65	64	60	55	65	69	74	67	66	83	80	80	77	72
	Minimum	33	42	39	39	44	54	52	58	51	42	31	39	60	35	55	57	42	50	45	35	28	28	31	40	48	28	36	39	40	48	48
Marble Hill	Maximum	72	76	80	85	85	87	90	87	81	82	70	85	80	72	90	74	72	58	60	60	55	60	68	75	65	65	80	72	78	78	72
	Minimum	34	47	50	60	45	46	44	60	54	54	35	35	62	39	50	58	50	45	55	35	29	32	35	45	48	52	39	49	39	50	54
Poplar Bluff §§	Maximum	69	69	72	82	85	88	91	92	88	87	69	72	82	81	74	87	78	71	55	64	53	58	69	72	76	63	69	82	79	80	82
	Minimum	36	40	41	43	44	47	56	61	61	44	38	48	45	42	43	54	55	47	46	35	26	27	34	41	42	32	34	35	41	45	44
Ozark Plateau.																																
Birchtree	Maximum	70	....	79	83	89	89	87	82	73	65	69	77	70	70	81	....	70	58	65	50	58	67	....	73	65	68	83	75	80	80	74
	Minimum	36	....	46	49	47	56	57	63	54	39	39	45	55	44	53	....	51	46	48	30	26	36	....	45	42	48	41	46	51	60	57
Cassville	Maximum	72	76	80	82	79	84	85	86	68	63	68	75	70	61	64	72	75	62	63	58	60	69	75	74	69	74	77	74	80	82	71
	Minimum	36	46	48	49	45	44	49	54	54	41	42	46	50	44	52	47	50	57	35	36	24	31	42	59	40	28	29	32	42	40	39
Eldon	Maximum	72	80	85	89	90	90	89	88	76	62	66	78	68	72	67	75	64	59	53	57	56	72	67	77	70	70	78	77	75	78	66
	Minimum	32	48	53	50	48	48	54	38	48	34	39	53	49	39	50	56	40	41	33	23	41	53	45	46	34	33	47	48	51	41	40
Fruit City	Maximum	70	76	80	74	76	78	79	74	75	60	60	78	75	72	79	80	68	57	63	61	62	67	72	73	63	67	84	75	80	80	79
	Minimum	37	52	48	44	55	58	61	65	54	37	40	56	54	44	55	60	51	40	52	32	34	45	42	55	43	50	36	48	51	56	51
Gano	Maximum	72	77	81	85	86	88	91	89	78	60	65	78	69	72	65	80	69	54	55	44	55	68	73	76	64	67	79	75	78	78	68
	Minimum	46	50	50	50	44	51	57	61	49	36	37	47	56	38	49	57	45	42	44	27	22	36	46	54	40	29	47	50	59	49	44
Hollister	Maximum	76	84	86	88	90	92	90	92	82	76	72	74	78	68	70	74	72	68	58	56	50	52	78	82	78	76	78	80	76	88	76
	Minimum	40	38	40	42	40	50	52	50	48	46	44	48	46	48	50	56	52	48	56	30	32	30	40	52	40	32	42	44	48	46	44
Ironton §§	Maximum	72	76	80	84	88	89	89	85	74	62	66	78	74	72	75	81	63	51	63	44	65	68	72	75	60	67	80	77	79	78	66
	Minimum	30	40	38	40	36	47	48	55	57	38	29	38	62	30	52	58	47	39	47	30	26	25	33	48	45	23	43	36	39	45	48
Lebanon §§	Maximum	73	80	83	87	88	87	91	90	88	62	67	74	69	70	69	79	67	62	60	45	58	72	75	78	58	72	81	75	79	81	69
	Minimum	38	53	54	54	46	47	47	56	54	34	35	45	54	45	47	57	46	46	47	27	23	23	44	53	37	34	34	48	48	51	43
Mountain Grove §§	Maximum	67	77	80	84	91	88	87	85	70	88	66	77	74	73	76	80	70	60	59	49	56	65	69	75	57	70	83	76	79	80	56
	Minimum	37	42	47	51	54	50	62	65	61	37	41	48	55	51	45	48	49	47	49	27	24	26	28	36	39	32	34	38	46	50	46
Neosho	Maximum	69	74	78	81	78	80	80	84	84	61	65	65	66	66	65	72	74	66	61	45	56	63	70	70	70	65	70	70	72	76	76
	Minimum	39	50	53	50	48	44	53	56	54	42	45	51	56	44	53	54	51	50	34	28	23	40	43	57	40	31	38	41	41	42	38
Rolla §§	Maximum	70	77	82	86	89	91	91	88	61	67	68	79	73	75	65	80	65	60	56	43	58	87	76	78	57	70	82	78	80	80	71
	Minimum	39	47	57	57	50	51	50	54	59	35	36	43	54	41	43	52	45	43	46	28	23	24	46	48	41	33	33	48	55	48	44
Springfield	Maximum	69	75	80	83	87	86	84	84	68	61	65	71	68	65	66	73	66	64	56	43	55	70	72	74	55	68	75	73	77	79	66
	Minimum	45	53	56	59	56	55	62	67	47	40	47	55	52	49	52	59	50	49	29	27	27	41	51	42	40	36	49	51	55	55	47
Southwest Plain.																																
Amoret	Maximum	76	83	86	90	90	89	89	93	80	61	68	73	70	73	66	67	68	64	62	44	61	65	63	66	65	70	77	74	70	76	69
	Minimum	45	55	57	67	53	50	55	57	50	36	45	51	52	44	53	59	54	41	32	26	24	40	47	49	37	35	40	49	41	42	38
Clinton	Maximum	76	83	87	91	90	88	91	92	85	70	65	77	72	75	70	74	67	65	54	44	60	71	68	70	57	69	76	76	73	77	68
	Minimum	44	53	58	61	53	52	56	60	51	35	35	53	54	43	53	60	42	45	35	26	35	39	48	48	40	33	33	49	48	45	40
Harrisonville §§	Maximum	75	82	87	90	88	85	89	90	52	60	66	71	69	72	64	64	61	61	50	41	60	73	60	52	54	68	72	72	68	73	66
	Minimum	41	49	55	59	53	53	53	59	51	37	37	47	54	44	49	56	41	40	44	25	24	24	41	45	39	33	37	41	48	45	38
Lamar §§	Maximum	77	84	87	90	95	93	90	92	....	67	70	76	72	70	70	77	70	66	54	46	63	74	72	78	59	72	80	76	79	84	70
	Minimum	45	47	58	57	54	52	52	60	....	37	39	50	55	45	50	56	47	47	51	28	24	32	48	51	41	34	42	48	48	45	39
Lamonte	Maximum	75	80	85	88	91	92	87	84	79	72	64	65	67	77	64	63	60	61	53	42	56	74	59	56	53	69	76	75	70	75	65
	Minimum	43	45	60	60	65	63	61	58	60	32	39	42	45	33	50	47	43	42	33	26	23	40	47	46	39	32	41	50	47	44	34
Marshall	Maximum	70	90	....	86	89	83	88	90	75	60	63	75	69	73	64	67	62	59	52	42	58	73	63	53	54	66	72	74	69	68	63
	Minimum	42	49	....	53	53	50	55	56	50	36	38	50	56	37	52	55	39	40	35	27	21	35	42	45	39	57	36	47	49	45	39
Warrensburg	Maximum	78	82	84	88	90	84	91	94	90	66	72	75	70	72	68	70	64	66	53	43	62	75	60	55	53	70	78	76	73	74	63
	Minimum	45	48	54	58	58	59	62	64	49	40	44	52	41	42	52	54	42	43	32	26	25	42	50	45	42	39	44	52	46	44	41
Warsaw §§	Maximum	76	87	88	90	90	91	92	93	82	68	67	76	68	75	70	76	65	63	58	45	60	75	70	78	70	71	80	76	75	80	70
	Minimum	37	50	54	63	68	67	50	57	32	37	36	47	47	37	53	59	44	42	35	27	21	32	40	50	41	28	39	42	43	40	34
Northwest Plateau.																																
Avalon	Maximum	73	80	83	87	90	84	88	90	81	62	62	71	70	71	67	70	67	65	56	39	58	72	69	50	54	66	74	72	68	60	66
	Minimum	53	60	63	68	70	51	60	60	50	38	40	55	55	46	54	56	45	50	36	27	27	45	42	45	42	50	53	54	55	50	40
Grant City	Maximum	75	79	82	91	78	79	85	90	66	59	63	71	67	73	63	74	65	66	58	40	59	67	58	44	52	64	70	70	56	59	53
	Minimum	47	53	55	62	54	48	55	54	46	34	39	46	45	42	45	45	34	40	31	23	22	35	38	37	36	38	30	50	46	38	37
Kansas City	Maximum	73	80	85	86	82	81	86	88	60	58	64	72	68	70	60	66	60	59	50	40	59	73	57	52	54	67	72	71	62	61	65
	Minimum	50	54	61	64	57	52	65	60	44	38	47	55	54	49	54	54	40	43	28	26	29	43	43	42	38	42	49	54	49	46	47
Kidder §§	Maximum	73	80	85	87	82	80	87	90	57	57	65	73	70	71	60	73	64	63	48	41	58	73	48	53	53	67	74	77	49	55	65
	Minimum	43	45	52	52	57	49	49	59	48	34	34	45	52	44	45	53	35	56	41	25	24	40	45	40	38	38	45	52	49	42	38
Lexington §§	Maximum	74	80	85	87	88	83	87	90	53	60	63	73	70	73	60	63	65	63	50	41	60	73	55	50	55	67	73	72	67	64	66
	Minimum	46	54	57	60	55	51	57	61	50	35	41	55	51	43	53	56	40	42	49	28	26	36	46	44	39	37	44	53	50	44	41
Maryville §§	Maximum	70	78	85	84	65	78	86	83	55	59	63	73	68	70	58	75	60	66	40	35	59	62	68	44	50	67	70	69	59	62	62
	Minimum	39	45	54	54	54	45	45	54	45	32	33	45	44	28	41	42	31	31	37	22	20	24	34	36	33	32	35	41	45	41	36
Oregon	Maximum	70	77	83	85	76	74	85	83	67	55	62	74	70	69	62	72	64	64	56	35	56	67	55	45	50	66	68	68	57	60	60
	Minimum	50	54	58	61	54	45	55	59	44	34	41	53	45	43	53	50	34	40	27	20	21	38	39	37	32	38	42	52	46	38	35
St. Joseph	Maximum	74	80	87	89	71	80	87	89	55	60	63	74	70	70	59	76	62	63	51	37	60	72	48	47	52	68	73	67	57	61	64
	Minimum	51	58	61	64	57	49	59	53	43	38	41	56	49	44	55	52	38	41	27	24	28	43	43	38	36	42	46	54	40	40	40
Trenton	Maximum	69	75	78	81	77	74	82	86	78	60	61	61	65	67	63	69	67	63	59	39	54	65	59	51	52	62	65	64	63	56	59
	Minimum	46	51	56	56	58	51	58	60	58	34	41	48	48	46	56	52	36	41	37	27	24	36	41	42	38	37	44	48	51	40	39

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning: the maximum temperature then read is charge

the preceding day on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

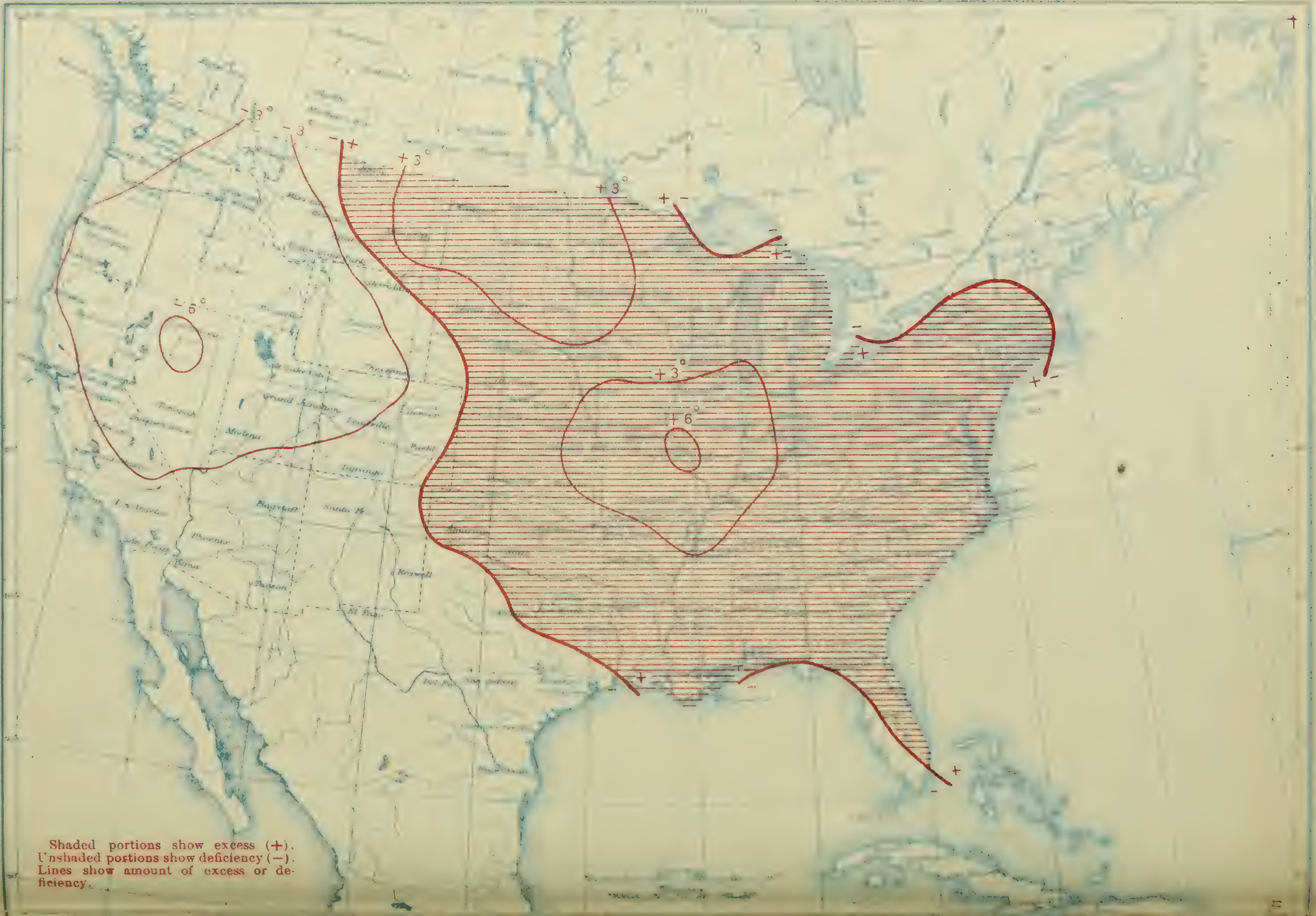
NOVEMBER, 1916

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
DECEMBER 15, 1916.

Departure of the Mean Temperature from the Normal, November, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XX. COLUMBIA, MO., NOVEMBER, 1916. No. 11.

GENERAL SUMMARY.

xcept for quite a severe freeze that prevailed over the entire from about the 12th to the 15th, the weather of Novem- vas exceptionally pleasant, and favorable for outdoor occu- ons. The precipitation was well distributed geographically, otal monthly amounts ranging between 2 and 3 inches, and ly falling during two spells, 8th and 9th, and 22d and 23d. snowfall was practically inappreciable. As a rule the pre- ation was sufficient for present needs.

heat, at the close of the month, was in fine condition. stand was good, and it was making excellent growth. The of the present month have greatly improved wheat pros- south of the Missouuri River generally. There were only scattered reports of insect damage. Considerable corn re- ned in shock, but it was generally in good condition, except ome damage by worms. In the northern half of the State ures afforded considerable feed, but south of the Missouri r they generally were very poor. In many districts a large unt of fall plowing was done, the ground breaking up ow.

ense fogs occurred over the State generally on from four to lays. From 6 to 9 a. m. of the 28th the fog was so dense Kansas City that trainmen had difficulty in reading the sig- and trains were delayed from 10 minutes to an hour.

TEMPERATURE.

ne monthly mean temperature, 64 stations reporting, was . The mean departure from the normal for 56 stations ng 10 or more years' record was plus 1.9°. The first ten , the 24th and 25th, and the last ten days were exception- mild, when the daily temperature excess averaged 6°, 10°, 5°, respectively. Maximum temperatures ranging from it 80° to 85° occurred on the 5th, and 6th. A severe cold prevailed from the 12th to the 15th; and while the fall in perature was sudden and the cold unusual for so early in month, previous low records for this month, especially it the same time in November, 1911, were not equaled. perature was 32° or lower on an average of only 12 days. he extreme northern tier of counties the average was about ays.

PRECIPITATION.

he average precipitation, 79 stations reporting, was 2.49 es. The departure from the normal for 66 stations having r more years' record was plus 0.14 inch. The greatest unt recorded in any 24 consecutive hours was 2.53 inches, moret on the 8th. The total precipitation was sufficient present needs, being quite well distributed, but the western of the State received somewhat more than did the eastern , the rain of the 8th not occurring generally over the east- counties. The greater part of the monthly precipitation on four days, the 8th, 13th, 21st, and 23d, being more or general rains. Snow fell on the 13th but it was light and portant.

he average number of days with 0.01 inch or more precip- ion was 4.

EVAPORATION.

he total evaporation from standard free exposure at Colum- Mo., was 1.741 inches, or 0.713 less than the preceding month of October. The average hourly wind velocity at the surface of the pan was 2.3 miles, about .8 mile greater than the preceding month. The total precipitation (7 a. m. October 31 to 7 a. m. November 30), was 2.21 inches, 0.76 inch more than in October.

WIND.

The prevailing winds were from the southwest. At St. Louis the wind velocity was somewhat above the normal, but the month, as a rule, was not windy, the average hourly velocity, 8 stations equipped with anemometers reporting, being about one mile above normal. Fresh to strong winds prevailed on the 8th, 23d, and 26th.

SUNSHINE AND CLOUDINESS.

It was a bright, sunshiny month. The average number of hours of sunshine, 6 regular stations reporting, was 209, or about 57 percent of the possible, and 13 percent above normal.

MISCELLANEOUS PHENOMENA.

Fogs—November 11th, 12th, 20th, 22d, 28th, and 29th. *Halos, solar*—November 2d, 3d, and 20th. *Halos, lunar*—November 3d. *Thunderstorms*—November 8th, 21st, and 28th.

ERRATA FOR OCTOBER, 1916.

Birchtree, mean temperature should be 60.0. Cardwell, mean maximum temperature, 77.9. Monthly mean, 61.2. Unionville, mean maximum temperature, 68.5. Koshkonong, total precipitation, 0.88 inches.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity. 7 a. m.	Mean relative humidity. 7 p. m.	Sunshine. Total hours.	Sunshine. Percentage of possible.	Wind. Total movement, miles.	Wind. Average hourly velocity.	Wind. Max. velocity. Miles per hour.	Wind. Max. velocity. Direction.	Wind. Max. velocity. Date.
Columbia	30.10	74	......	206	68	6,874	9.5	33	sw.	26
Hannibal	30.10	74	......	......	......	7,727	10.7	33	s.	26
Kansas City	30.10	69	55	209	69	9,711	13.5	39	nw.	23
St. Joseph	30.09	77	56	203	68	6,755	9.4	36	nw.	23
St. Louis	30.11	73	52	218	72	11,047	15.3	58	s.	8
Springfield	30.13	72	57	221	72	8,462	11.8	38	nw.	8
Cairo, Ill	30.16	77	55	......	......	5,697	7.9	31	sw.	23
Keokuk, Iowa	30.10	77	68	199	68	6,269	8.7	30	nw.	23

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature. Mean.	Temperature. Departure.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Mean.	Precipitation. Departure.	Precipitation. Greatest in 24 hours.	Precipitation. Total snowfall, unmelted.	Number of Days. With .01 inch or more.	Number of Days. Clear.	Number of Days. Partly Cloudy.	Number of Days. Cloudy.
1888	41.6	−2.0	87	15	3.26	+0.94	.....	.....	11	....	....	....
1889	39.9	−3.7	73	8	3.43	+1.11	.....	.....	7	....	....	....
1890	46.5	+2.9	80	20	2.31	−0.01	.....	.....	5	....	....	....
1891	39.6	−4.0	82	−2	3.60	+1.28	.....	.....	5	....	....	....
1892	40.1	−3.5	79	9	2.60	+0.28	......	1.0	6	11	7	12
1893	40.9	−2.7	79	−1	1.59	−0.73	4.86	0.3	4	14	9	7
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	−1.3	82	5	2.18	−0 14	4.00	0.2	6	11	7	12
1897	43.4	−0.2	82	−3	2.40	+0.08	2.39	T.	6	13	8	9
1898	39.9	−3.7	79	−8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+0.1	84	7	2.58	+0.26	4 55	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+6.5	85	18	3.52	+1.20	2.14	0.4	9	8	9	13
1903	40 9	−2.7	79	2	1.24	−1.98	2.44	1.1	5	13	8	9
1904	46.3	+2.7	83	11	0 22	−2.10	0.68	T.	2	21	5	4
1905	45 8	+2.2	83	2	1.94	−0.38	2.49	T.	6	18	6	6
1906	42.5	−1.1	85	−3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+4.0	87	9	4.14	+1.82	4.50	0.2	8	15	7	8
1909	53 6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	−4.5	93	−3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	48 6	+4.0	89	2	0.65	−1 84	1 90	0.1	3	19	6	5
1915	49.5	+4.9	87	12	2 76	+0.33	2.62	0.1	5	16	7	7
1916	46.9	+1.9	85	3	2.49	+0.14	2.53	0 1	4	19	4	7

Climatological data for November, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	621	39								2.39	−0.04	1.40	0	5	21	1	8	nw.	C. Randecker.
Brunswick	Chariton	652	36	45.2	+2.9	81	5	11	14	48	1.61	−0.31	0.89	0	5	18	1	11	sw.	Louis Benecke.
Clifton Hill	Randolph	731		48.0		80	5	12	14	36	2.43		1.30	0	4	19	4	7		L. S. Harlan.
Columbia	Boone	784	26	46.4	+4.0	80	5	11	14	37	2.21	−0.10	1.28	T.	6	18	4	8	s.	U. S. Weather Bureau.
Fayette	Howard	725	31	45.7[a]	+2.6	81	5	8	14	35	2.36	+0.32	1.52	0	2					Prof. T. B. Smith.
Glencoe	St. Louis										1.88		1.20	T.	4	20	6	4		V. R. Neel.
Gorin	Scotland	700	27								1.78	−0.19	1.09	T.	2	16	3	11	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	45.6	+5.1	79	5	12	14	39	2.01	+0.06	1.08	T.	5	19	3	8	sw.	U. S. Weather Bureau.
Hermann	Gasconade	519	42								2.07	−0.75	0.90	0	6	16	8	6	e.	C. T. Maushund.
Jefferson City	Cole	628	30	47.0	+2.7	81	5	11	14	45	2.03	−0.24	0.97	0	4	22	4	4	s.	Miss Emma Swift.
Keytesville	Chariton	660	3								1.83		1.02	T.	4					J. T. Dewey, M. D.
Louisiana	Pike	500	38	47.5	+3.4	79	7	13	15	43	1.91	−0.35	0.80	T.	4	23	2	5	w.	J. T. Farrell.
Macon	Macon	881	18	44.0	0.2	79	5	9	14†	44	1.97	+0.46	1.15	T.	4	18	4	8	sw.	John A. Cook.
Mexico	Audrain	797	38	45.5	+2.4	81	5	10	14	42	2.57	+0.17	1.20	T.	4	19	0	11		J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	49.4	+3.1	82	5	11	14	37	2.84	+0.23	0.99	0.5	4	17	6	7	w.	E. E. Steines.
Pacific	Franklin	461									1.90		1.15	0	4	18	0	12	nw.	Wm. Dreher.
Palmyra	Marion	652	4	43.4	+0.3	78	7	10	14	42	1.69	−0.65	1.05	0	3	19	2	9	sw.	W. B. Markell.
St. Catherine	Linn	914	3	44.3		77	5	7	14	37	1.45		1.00	0	4	17	5	8	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	48.8	+3.5	83	4	12	14	36	2.48	−0.18	0.88	0	3	12	9	9	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	49.2	+5.8	79	4	15	14	28	2.53	−0.35	1.73	0.1	5	19	4	7	s.	U. S. Weather Bureau.
St. Louis (2)	do	578	4	48.4		79	4	15	14	29	3.24		1.60	0.1	5	20	4	6	s.	St. Louis University.
Steffenville	Lewis	576	23	44.7	+0.9	82	5	10	14	42	2.95	+1.07	1.30	T.	3	16	7	7	w.	Frank Hall.
Union	Franklin	568									2.62		1.60	0	5	19	5	6		J. Wm. Keller.
Unionville	Putnam	1,072	23	41.4	+1.4	81	5	3	14	45	2.31	+0.64	1.65	T.	4	19	3	8	ne.	Geo. W. Davis.
Valley Park	St. Louis	430									2.44		1.60	0	4	18[a]	3[a]	8[a]	w.	J. H. Lucksinger.
Warrenton	Warren	865	25	45.4	+2.4	80	5	11	14†	44	2.14	−0.50	1.10	0	5	17	7	6	nw.	Prof. J. H. Frick.
Section means and extremes				46.1	+2.7	83	4	3	14	48	2.22	−0.04	1.73	T.	4	18	4	8	sw.	
Southeast Lowlands.																				
Cardwell ++	Dunklin	225	5	50.0		83	4	15	15	43	2.45		0.90	T.	5	22	4	4	sw.	F. E. Tate.
Caruthersville	Pemiscott	220	25	52.5	+2.0	82	4†	16	15	40	1.47	−2.55	0.77	0	3	23	1	6	e.	H. E. Averill.
Doniphan	Ripley	440	11	48.9	+0.9	80	4	15	15	38	3.93	+1.03	1.63	T.	6	21	3	6	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	48.8[a]	+2.0	82	4	12	15	45	2.19	−1.30	1.30	0.5	3	16	9	5	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	50.0	+6.1	85	4	11	15	45	2.55	−0.66	1.10	0	4	20	7	3	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22								2.13	−2.06	0.80	0	6	18	4	8	sw.	Miss Josie Smith.
Patton (near)	Bollinger	430	1								1.45		0.60	0	3	20	0	10	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	47.2	−0.5	78	2	15	15†	43	2.89	−0.59	1.33	0.1	6	20	3	7		Miss Belle Kinne.
Sikeston ++	Scott	328	15	47.8[b]	0.5			19	14	37	2.11	−1.73	1.09	0	6	23	5	2	s.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	50.7	+3.8	80	4	19	15	27	1.70	−2.32	0.91	1.0	6	18	6	6	s.	U. S. Weather Bureau.
Section means and extremes				49.7	+2.5	85	4	11	15	45	2.29	−1.21	1.63	0.2	5	20	4	6	s.	
Ozark Plateau.																				
Arlington	Phelps	767	14								1.65	−1.08	0.82	T.	5	16	1	13	nw.	G. V. Randolph.
Birchtree	Shannon	1,200	22	47.2[i]	+0.6	80	5	13	14†	42	3.04	+0.21	1.30	0	5	22	2	6	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	46.0	−1.1	73	1†	9	14	36	3.21	+0.47	1.06	0	4	22	2	6	sw.	A. C. Fink.
Cassville	Barry	1,500	5	47.5		82	1	12	14	47	2.65		0.78	T.	6	23	0	7	s.	Mrs. Zuma Bloomer.
Crocker ++	Pulaski	1,300	5	56.1		83	8	10	14	39	3.21		1.68	0	3	23	0	7		Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	48.8	1.1	83	2	8	14	44	3.06	+0.22	0.93	T.	7	23	0	7	n.	H. E. Dean.
Eldon	Miller	934	15	47.0	+1.3	82	4†	9	14	42	2.08	−0.22	0.89	T.	4	15	8	7	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	51.0		81	4	16	15	35	2.89	−1.21	1.30	0	3	15	7	8	s.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	48.2	+0.6	81	4†	9	14†	47	2.43	+0.23	1.03	0.4	4	21	4	5	nw.	A. C. Leach.
Goodland	Iron	1,000	11	46.0	+0.1	81	4	8	15	47	3.15	+0.86	1.10	0	5	20	4	6	s.	F. M. Adams.
Hollister	Taney	1,000	7	49.8	+1.7	82	1†	14	14†	48	5.60	+2.66	1.60	0	6	23	0	7	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	49.7	+3.3	80	1	10	14	40	2.28	−0.26	1.15	0.2	4	22	3	5	s.	R. F. Harmon.
Ironton	Iron	925	38	46.1	+2.1	82	4	9	15	45	3.07	−0.64	1.75	0.5	5	18	5	7	s.	W. H. Delano.
Koshkonong	Oregon	911	15	52.3	+2.5	83	4	14	14	35	3.32	+0.33	1.55	0	5	21	4	5	nw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	48.5	+2.1	83	11	9	14†	46	2.69	+0.32	0.82	T.	6	23	1	6	s.	Leonard E. Dickerson.
Lockwood	Dade	1,088	21	46.5	−2.1	79	1†	9	14	35	2.87	+0.83	0.89	0.5	5	20	0	10	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	47.4	+0.1	80	4	10	14†	43	1.86	+0.26	1.24	T.	4	17	6	7	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,083	33	46.8	−0.6	77	4†	11	14	37	2.16	−0.72	0.78	0	7	22	6	2	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	49.4	+4.9	84	4	8	14†	46	2.48	−0.06	0.97	1.0	5	21	3	6	s.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	48.3	+3.9	78	4	11	14	30	2.88	+0.24	0.97	1.0	6	21	4	5	s.	U. S. Weather Bureau.
Steelville	Crawford	755	15								3.14	+0.40	1.71	T.	6	21	2	7	sw.	Thomas D. Slater.
Section means and extremes				48.6	+1.1	84	4	8	14†	48	2.84	+0.15	1.75	0.2	5	20	3	7	s.	
Southwest Plain.																				
Amoret	Bates	850	7	46.5		82	5	7	14	43	3.58		2.53	0	3	22	0	8	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	48.0	+1.9	81	4†	10	14	37	2.18	−0.16	1.35	T.	3	18	6	6	sw.	W. G. Bigelow.
Clinton	Henry	800	29	48.4	+1.0	84	4	10	14	41	2.35	+0.42	1.30	0	4	19	5	6	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	43.8	+1.4	79	5†	8	14	38	3.00	+1.03	1.42	0	4	17	7	6	sw.	A. J. Sharp.
Lamar	Barton	964	35	48.6	+1.9	83	1†	10	14	43	2.58	+0.40	1.30	T.	6	23	0	7	sw.	Dick B. Houston.
Lamonte	Pettis	863	27																	J. Ed. Hall.
Marshall	Saline	779	25	45.8	1.0	80	5	7	14	40	2.35	+0.27	1.55	0	4	19	6	5	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	48.8	+4.0	82	5	10	14	41	1.80	−0.13	0.98	T.	4	22	1	7	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	46.8	+1.8	84	5	10	14	35	3.09	+1.28	2.39	T.	3	19	4	7	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	47.1	−0.7	83	4	9	14	51	3.23	+1.00	1.23	0.2	5	21	4	5	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1								2.05		1.18	0	4	22	1	7	sw.	John W. Cauthorn.
Section means and extremes				47.1	+1.3	84	4	7	14	51	2.62	+0.51	2.53	T.	4	20	4	6	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	47.9	+3.7	78	4†	14	14†	35	1.85	−0.13	1.20	0	2	21	2	7	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	42.2	−1.3	78	2	5	14	48	2.62	+1.14	2.12	0	3	16	7	7	sw.	M. H. Moulton.
Chillicothe ++	Livingston		1								1.69	−0.75	0.90	0	4	18	1	11		Hocey O. Dupy.
Conception	Nodaway	982	31					5	14		2.64	+1.40	2.15	T.	2	13	12	5	nw.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16								1.95	+0.16	1.45	T.	3	18	3	9	sw.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	42.5	−0.3	77	3†	4	14	34	2.59	+1.17	2.00	T.	3	23[a]	2[a]	4[a]	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	46.9	+5.4	79	5	13	14	26	2.83	+0.98	1.88	T.	3	19	4	7	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	41.2	+2.0	78	3†	8	14†	42	1.98	+0.32	0.80	T.	4	22	1	7	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	46.3	+2.3	80	5	10	14	36	2.40	+0.47	1.17	0	4	20	0	10	s.	J. W. Keithley.
Liberty	Clay	864	27	46.2	+2.5	81	5	8	14	37	2.75	+1.09	1.90	T.	2	22	4	4	s.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	40.2	0.8	79	3	4	14	42	2.70	+1.25	1.26	T.	6	20	3	7	s.	J. R. Brink.
Oregon	Holt	1,113	60	43.0	2.8	79	3	7	14	32	2.56	+0.93	1.78	T.	3	16	8	6	nw.	Tom Curry.
St. Joseph	Buchanan	967	14	44.8		79	3	12	14	31	3.11	+1.28	2.06	0.1	4	18	6	6	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	1	42.1	+2.3	78	3	6	14	38	2.53	+1.28	2.00	T.	3	20	4	6	sw.	John F. Frazier.
Trenton	Grundy	812	21	43.5	+0.9	75	6	9	14	31	2.00	+0.35	1.07	T.	3	16	4	10	sw.	W. H. Estes.
Section means and extremes				44.2	+1.9	81	5	4	14	48	2.46	+0.84	2.15	T.	3	19	4	7	sw.	
State means and extremes				46.9	+1.9	85	4	3	14	51	2.49	+0.14	2.93	0.1	4	19	4	7	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ++Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for November, 1916.

Stations.	Watersheds.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
lle	Missouri								.04	1.40													.32	.60	.03								2.39
eck	Grand								.16	.89													.30	.23						.03			1.61
Hill	Chariton								1.30	.22													.55	.36									2.43
ia**	Missouri								1.25	.03			T.	.01								.19	.45	.28				T.					2.21
	......do								1.52														.84										2.36
	......do																																....
	Maramec									.60				.05	.03								T.	1.20	T.								1.88
	Mississippi								1.09														.69										1.78
bal***	......do							T.	.77	.01				T.								.45	.67	.11									2.01
un	Missouri									.72				.12	.01								.30	.90	.02								2.07
on City	......do									.97			.09										.32	.65									2.03
ville	Chariton								1.02	.16				T.	T.								.45	.20									1.83
na	Mississippi								.80	.20				T.								T.	.80	.11									1.91
	Chariton								.04	1.15				T.									.33	.45									1.97
	Mississippi									1.20				T.	T.								.52	.84	.01								2.57
ld	Meramec								T.	.86				.05									.94	.99									2.84
	......do									.50				.05									.15	1.15	.05								1.90
ra	Mississippi									1.05													.19	.45									1.69
erine	Grand								1.00	.10				T.									.30	.05									1.45
arles.	Missouri									.78													.88	.82									2.48
ns (1)***	Mississippi								.63	.10				.05								T.	1.29	.46									2.53
gs (2)	......do								.65	.05				.06									1.60	.88									3.24
ville	......do								1.05	1.30				T.									.60										2.95
	Meramec									.69				.07	.03								.23	1.60									2.62
ville	Grand								.45	1.20				T.									.30	.36									2.31
Park	Merrmec									.73				.06	T.								.05	1.60	T.								2.44
aton	Mississippi									.80				.06									.17	1.10	.01					T.			2.14
east Lowlands.																																	
ell	Mississippi									.90					.10			T.					.90	.47						.08			2.45
ersville	......do							.77							T.			T.					.60	.10					T.	T.			1.47
ean	Black									1.63				.05	.25			.05					1.48	.47					T.	T.			3.93
n	Mississippi								1.30						.14								.75										2.19
Hill	......do									1.10				T.		.20							1.00	.25									2.55
adrid	......do									.80	.23				.11								.36	.60							.03		2.13
(near)	......do								.45					.40									.60										1.45
Bluff	Black									1.33	.03				.13				T.				.53	.85	.02				T.				2.89
n	Mississippi									1.09					.02								.81	.16	.01					.02			2.11
ill ***	......do								T.	.91				.11	.01			.01					.62	.04					T.				1.70
k Plateau.																																	
ton	Gasconade									.82				.06	T.								.38	.28	.11								1.65
ree	Black									.88				.30									1.30	.33					.23				3.04
r	Osage								1.06													.70	.60	.85									3.21
lle	White								.73	.20				.38								.35	.78	.21									2.65
r	Gasconade									.60				.93										1.68									3.21
	Neosho								.93	.08				.42								.46	.70	.19					.28				3.06
	Osage								.89	.15				T.								.29	.75						T.				2.08
ity	Black								T.	1.10				.49									1.30										2.89
	Meramec									.91				.14									1.03	.35									2.43
and	Black									.80					.30								1.10	.90					.05				3.15
er	White									.75						.75						1.20	1.10	1.60			.20						5.60
on	Gasconade								T.	.58				.33								T.	1.15	.22									2.28
n	Mississippi									.85				T.	.45								.30	1.45	T.				.02	T.			3.07
onong	Black									1.30				.10				T.				T.	1.55	.20					.17				3.32
on	Osage									.77				.15	.25								.82	.67					.03				2.69
ood	......do									.29				.09								.70	.35	.84				T.					2.87
ain Grove	White													.08	.18								1.24	.36									1.86
o	Neosho								.78	.09				.30								.05	.65	.23				T.	.06				2.16
	Meramec									.97				.10	.16								.28	.97									2.48
ield **	White								.94					.36	T.			T.				.51	.89	.04					.14				2.88
lle	Meramec									1.12				.06	.06								.17	1.71	.02				T.				3.14
west Plain.																																	
t	Osage								2.53	T.				T.								T.	.92	.13									3.58
on City	......do								1.35				T.										.58	.25									2.18
n	......do								1.30	.12													.50	.43									2.35
onville	......do								.57	1.42													.64	.37									3.00
	Neosho									1.30				.18	T.							.09	.48	.49					.04				2.58
te	Missouri																																....
ail	......do								1.55	.21			T.									T.	.37	.22									2.35
a	Osage								.93	.05				T.									.65	.17									1.80
sburg	Missouri								2.39													T.	.62	.08									3.09
w	Osage								1.23	.27				.29								T.	.80	.64					T.				3.23
ay	Missouri								.31	1.18				T.									.32	.24									2.05
west Plateau.																																	
	Grand								1.20															.65									1.85
ny	......do								2.12				T.	T.									.37	.13									2.62
othe	......do								.31	.90													.25	.23									1.69
ption	Missouri								2.15			T.	T.										.49										2.64
n	Grand								1.45					T.									.47	.03									1.95
City	......do								2.00	T.		T.	T.	T.	T.								.54	.05									2.59
City***	Missouri								1.88													.31	.64										2.83
r	Grand								.70	.80				T.									.30	.18									1.98
gton	Missouri								.40	1.17													.45	.38									2.40
	......do								1.90						T.								.85										2.75
ille	......do								1.26	.55				.03	.01								.22	.63									2.70
	......do								1.78					.04									.74										2.56
eph***	Missouri								2.06				T	.01								.17	.87										3.11
	......do							.02	2.00			T.	T.	T									.51										2.53
on	Grand							.53	1.07				T.	T.									.40										2.00

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the t observation. ' Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. gular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate f fall not recorded

Evaporation from Standard Free Exposure at Columbia, Mo.

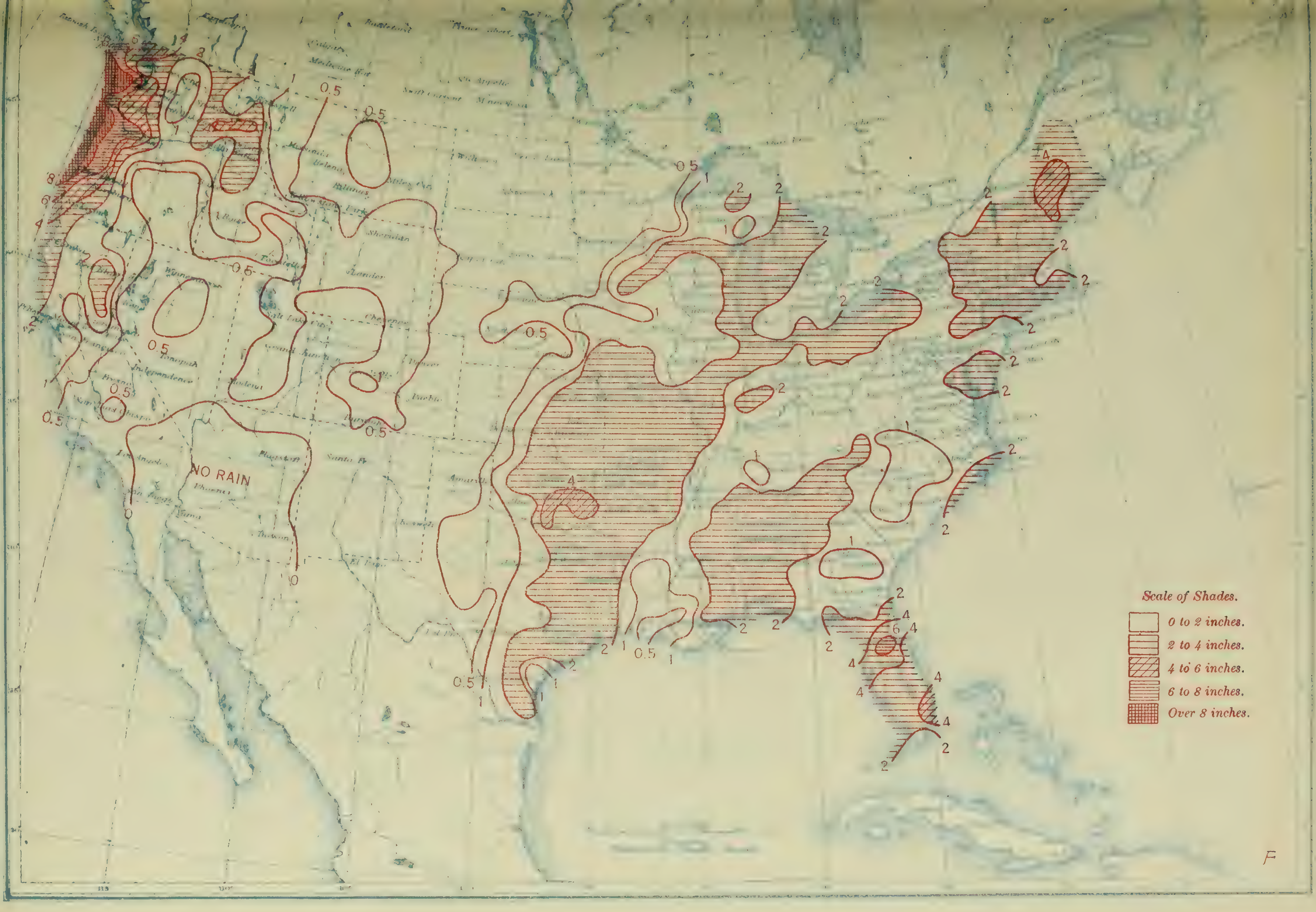
Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mo.
vaporation (inches)	.103	.082	.098	.086	080	.122	.110	.127	124	070	.071	.041	001	*	*	*	*	*	.144	.030	.067	003	019	.075	*	*	.140	.053	.033	.062	....	1.741
urly wind velocity surface of pan	1.4	1.1	1.2	1.7	1.1	1.8	3.2	3.5	2.8	2.7	3.0	2.6	2.9	4.2	2.4	0.5	1.9	1.7	2.1	1.4	2.2	2.3	2.6	5.0	2.5	2.9	3.6	2.5	1.1	1.9	....	2.3

* Frozen over; total evaporation in next following measurement.

Daily temperatures for November, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	77	75	77	80	81	79	78	57	60	65	49	36	27	32	37	51	52	52	70	70	41	45	41	39	48	55	56	55	57	57	
	Minimum	38	36	36	50	57	51	61	52	35	35	35	30	25	11	13	16	28	22	22	24	36	36	39	27	21	30	41	44	36	26	
Columbia	Maximum	75	69	74	77	80	78	77	67	58	61	53	39	32	29	32	51	49	57	70	66	43	49	46	37	47	58	59	59	54	55	
	Minimum	38	38	49	55	55	59	63	42	37	40	35	32	15	11	14	25	27	22	40	40	38	38	35	25	23	35	46	39	33	29	
Fayette	Maximum	77	71	76	79	81	78	76	65	57	62	50	36	28	28	32	53	57	....	69	67	40	47	45	38	46	56	57	60	56	55	
	Minimum	36	42	46	53	50	59	62	44	37	38	32	28	12	8	10	25	20	....	40	37	36	36	35	24	23	31	41	40	36	28	
Hannibal	Maximum	74	65	71	74	79	78	78	69	57	61	52	42	30	28	32	52	48	55	68	65	39	53	48	36	41	56	57	61	55	56	
	Minimum	35	37	40	54	49	61	64	42	38	42	36	30	16	12	14	22	27	21	38	39	35	38	36	23	20	34	46	41	35	30	
Jefferson City §§	Maximum	76	70	73	80	81	78	78	71	58	65	65	60	29	28	33	56	47	57	70	67	44	51	47	37	47	58	60	60	55	55	
	Minimum	35	41	42	52	49	56	63	64	37	38	39	35	28	11	14	21	32	23	25	42	38	37	35	28	22	27	36	40	34	30	
Macon §§	Maximum	73	69	72	76	79	78	76	56	56	62	51	36	25	28	34	52	49	57	66	65	39	44	44	37	45	56	55	59	56	55	
	Minimum	39	39	42	49	46	48	57	55	35	35	34	31	24	9	9	13	26	20	22	36	34	35	36	25	20	25	37	42	35	27	
Mexico §§	Maximum	76	71	74	80	81	79	79	66	57	54	53	41	29	31	33	52	51	56	69	68	40	52	47	38	44	57	57	64	57	56	
	Minimum	34	35	36	43	50	52	55	60	35	43	35	30	27	10	13	11	30	21	38	38	35	35	37	21	18	26	34	45	37	30	
Oakfield	Maximum	76	70	71	81	82	78	75	71	67	69	65	55	40	30	35	56	50	55	72	71	69	55	55	41	45	60	59	61	58	58	
	Minimum	40	45	46	60	55	57	60	62	40	44	37	34	23	11	13	19	33	21	40	46	34	41	36	28	19	32	44	48	41	31	
St. Catharine	Maximum	71	69	71	74	77	76	76	70	56	60	47	35	32	30	34	52	49	57	63	60	54	42	45	40	45	54	54	58	56	50	
	Minimum	36	40	46	49	50	55	60	40	32	46	34	31	20	7	10	19	28	20	32	36	34	35	35	22	18	34	41	35	35	24	
St. Louis (1)	Maximum	71	67	66	79	79	76	75	71	56	67	62	57	39	29	34	53	48	51	68	68	49	45	53	39	43	56	58	60	56	55	
	Minimum	47	51	48	60	59	56	59	53	44	44	41	39	22	15	20	25	31	28	42	44	36	46	38	30	26	35	42	50	46	36	
Unionville §§	Maximum	70	72	70	80	81	78	76	56	57	55	36	31	21	25	32	50	44	58	66	58	46	42	40	34	45	54	52	58	54	55	
	Minimum	42	36	38	42	45	50	56	51	32	34	31	29	20	3	4	10	20	22	21	30	29	31	33	20	18	26	30	28	29	28	
Warrenton §§	Maximum	76	69	71	78	80	77	78	71	57	63	58	40	29	27	31	52	47	53	69	66	41	54	46	36	43	57	59	58	55	54	
	Minimum	39	40	45	49	54	54	47	49	38	37	36	32	28	11	11	15	24	20	25	42	35	36	36	27	21	23	39	46	40	32	
Southeast Lowlands.																																
Cardwell	Maximum	75	75	77	83	79	80	77	77	73	65	70	74	66	40	40	56	55	55	67	66	70	64	60	50	46	58	62	60	58	58	
	Minimum	32	42	37	50	44	45	55	59	49	33	32	36	35	20	15	17	32	24	25	31	38	52	41	34	20	25	39	39	36	29	
Caruthersville	Maximum	76	78	78	82	81	82	78	78	71	68	75	77	67	44	43	57	55	57	69	76	73	64	60	48	48	58	64	69	55	60	
	Minimum	38	46	52	52	50	48	53	50	50	38	39	42	38	23	16	21	31	22	30	36	43	50	41	34	23	28	37	54	40	32	
Doniphan	Maximum	70	76	75	80	78	78	76	75	73	64	64	70	65	35	39	56	53	55	65	66	61	60	58	52	45	54	60	61	55	55	
	Minimum	33	42	38	45	44	43	51	62	47	32	36	34	33	17	15	19	30	22	27	30	39	50	39	32	19	28	38	53	36	26	
Jackson	Maximum	74	75	73	82	78	77	75	74	77	69	69	73	65	58	35	50	46	55	70	70	60	69	61	62	53	55	60	61	57	....	
	Minimum	31	39	32	44	43	43	43	42	44	35	32	32	30	16	12	16	27	21	25	30	33	44	38	31	18	28	37	51	35	....	
Marble Hill	Maximum	72	74	76	85	78	77	72	75	70	67	69	72	64	40	34	65	65	65	70	71	72	55	55	47	47	55	65	60	63	67	
	Minimum	50	40	37	52	45	49	52	65	48	32	32	32	31	16	11	20	21	22	25	52	38	41	37	30	16	25	38	37	32	28	
Poplar Bluff §§	Maximum	71	78	73	64	59	76	76	75	62	68	71	75	43	35	41	56	50	59	69	70	65	65	55	41	47	59	63	67	56	61	
	Minimum	31	35	39	39	45	43	43	45	46	34	32	34	34	26	15	15	20	20	40	21	33	40	40	32	19	19	26	39	49	29	
Ozark Plateau.																																
Birchtree	Maximum	74	77	....	73	80	73	....	....	65	69	67	69	35	30	35	60	56	57	....	69	60	58	58	48	47	52	59	....	58	58	
	Minimum	38	48	....	52	55	58	....	....	52	36	41	....	25	13	13	18	34	23	....	36	41	47	48	28	17	23	28	....	34	30	
Cassville	Maximum	82	81	77	78	79	76	75	73	73	67	71	56	40	32	42	63	52	60	57	67	62	55	52	46	55	55	58	60	56	57	
	Minimum	35	44	42	43	39	57	55	52	35	32	38	34	23	12	14	20	35	20	27	27	23	39	31	28	19	28	43	42	31	21	
Eldon	Maximum	78	72	79	82	82	80	77	75	64	65	58	44	36	33	34	57	58	70	70	54	56	50	48	38	48	57	59	60	56	56	
	Minimum	36	38	43	54	48	56	60	54	35	40	35	34	19	9	14	23	20	33	35	38	36	33	33	25	20	28	42	34	28	22	
Fruit City	Maximum	74	75	73	81	78	77	75	70	69	69	67	70	54	31	37	59	54	58	70	70	60	57	57	50	56	58	59	61	60	58	
	Minimum	40	45	38	54	54	51	55	61	44	36	40	41	27	20	16	23	42	25	36	41	44	47	34	28	29	31	50	44	42	34	
Gano	Maximum	75	71	72	81	81	76	73	70	66	68	65	58	39	27	32	57	51	55	68	69	60	66	55	38	44	57	56	59	55	55	
	Minimum	35	45	45	55	54	56	58	49	39	38	34	35	22	9	9	10	35	33	38	41	43	41	32	26	22	30	42	48	31	30	
Hollister	Maximum	82	80	82	80	82	78	80	76	56	68	70	52	36	34	44	66	68	70	68	70	56	60	56	54	52	60	62	64	62	60	
	Minimum	40	44	42	40	42	40	42	52	40	30	30	34	32	14	14	18	42	40	38	30	36	52	40	30	24	22	42	48	38	24	
Ironton §§	Maximum	73	72	71	82	79	78	76	71	58	68	65	70	36	35	37	57	50	56	69	68	57	56	50	41	46	56	59	61	59	57	
	Minimum	28	35	30	47	42	51	46	60	44	30	28	27	34	10	9	13	28	20	25	30	33	42	36	28	13	26	36	49	32	23	
Lebanon §§	Maximum	79	75	80	82	81	79	75	74	58	70	83	43	34	23	44	60	50	59	70	70	53	58	55	40	54	59	60	65	57	56	
	Minimum	39	41	41	55	54	59	59	61	38	36	38	33	30	9	9	14	32	24	24	40	41	41	32	28	19	24	39	44	33	27	
Mountain Grove §§	Maximum	76	79	76	80	79	76	74	69	53	61	66	56	32	34	36	61	56	51	58	65	53	54	51	39	51	55	57	64	59	57	
	Minimum	43	46	48	52	53	54	55	57	39	37	42	35	30	10	10	18	27	25	27	34	38	35	32	27	19	25	29	35	40	38	
Neosho	Maximum	74	74	72	77	77	75	73	71	54	61	66	58	40	27	37	55	55	54	60	65	58	44	45	45	45	52	57	55	51	51	
	Minimum	37	45	48	51	46	63	62	50	33	42	31	34	23	11	14	25	33	22	35	36	42	37	34	29	36	34	40	41	31	21	
Rolla §§	Maximum	79	73	73	84	80	79	76	69	58	68	71	40	30	27	34	58	49	61	70	71	46	57	49	49	49	58	61	63	57	57	
	Minimum	39	46	45	49	51	54	58	64	40	38	38	36	30	8	8	14	28	22	24	42	42	41	33	28	19	23	33	44	39	29	
Springfield	Maximum	78	75	77	78	77	76	72	68	55	65	64	43	31	25	35	58	48	55	67	66	56	53	47	36	48	55	58	58	55	54	
	Minimum	48	54	55	58	58	57	59	42	37	42	43	31	15	11	19	28	37	31	41	44	44	35	33	27	24	33	42	46	39	32	
Southwest Plain.																																
Amoret	Maximum	70	78	76	80	82	78	79	74	60	60	63	41	35	34	39	59	51	61	70	65	55	38	50	40	47	55	56	56	50	52	
	Minimum	48	35	38	46	55	61	62	41	31	33	34	30	20	7	15	23	32	32	35	34	35	35	35	25	23	33	42	32	34	30	
Clinton	Maximum	78	76	80	84	82	79	76	71	60	63	53	42	35	33	37	59	64	61	71	68	65	43	48	40	49	58	57	56	56	56	
	Minimum	37	43	48	59	50	59	61	46	35	41	35	31	22	10	18	27	34	34	48	35	37	37	35	26	21	34	34	45	34	25	
Harrisonville §§	Maximum	74	70	75	78	79	79	77	57	57	61	43	33	25	32	35	56	51	60	65	62	38	39	40	36	46	55	56	54	59	55	
	Minimum	37	42	42	46	50	52	59	57	32	32	35	31	24	8	10	10	27	21	22	39	36	36	34	26	18	31	38	34	32	23	
Lamar §§	Maximum	83	80	80	83	82	78	75	78	60	69	68	40	34	33	40	60	52	62	72	72	44	40	50	40	51	58	58	58	57	58	
	Minimum	40	43	48	55	56	59	59	64	32	37	36	33	27	10	11	18	33	29	30	38	42	38	34	26	20	31	43	45	35	25	
Lamonte	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
Marshall	Maximum	74	71	78	78	80	78	76	70	57	61	56	44	34	29	33	54	50	57	68	63	58	44	45	40	46	56	56	55	54	55	
	Minimum	34	36	41	52	48	59	59	45	33	45	34	32	22	7	12	20	29	21	35	35	35	37	35	24	20	32	44	42	36	24	
Warrensburg	Maximum	76	72	78	80	84	79	76	70	52	63	45	35	32	32	36	58	51	58	69	68	49	41	45	38	48	57	52	50	54	60	
	Minimum	41	44	52	57	60	60	58	42	36	42	34	31	20	10	17	26	32	26	38	42	36	36	34	26	24	35	38	39	38	31	
Warsaw §§	Maximum	80	74	80	83	82	80	77	73	60	65	59	47	36	32	38	59	55	62	72	69	59	48	48	43	50	59	60	58	58	58	
	Minimum	29	34	40	53	40	60	62	47	35	44	35	34	23	9	13	18	30	18	30	29	39	40	35	27	16	35	45	37	27	19	
Northwest Plateau.																																
Avalon	Maximum	74	72	75	78	78	78	76	73	57	63	52	37	31	29	35	53	50	60	66	65	55	42	42	38	46	54	56	60	55	56	
	Minimum	40	40	50	54	54	58	60	56	35	50	37	31	22	14	14	28	33	25	36	45	39	38	38	27	30	38	48	50	38	40	
Grant City	Maximum	69	68	77	72	74	77	71	70	65	55	41	29	25	25	34	49	43	59	67	59	47	35	40	38	40	55	52	53	52	56	
	Minimum	38	40	45	47	50	58	52	45	31	32	29	25	15	4	11	20	30	23	34	34	33	33	32	25	23	21	42	21	34	26	
Kansas City	Maximum	72	68	78	77	79	75	72	68	57	60	41	33	28	30	36	56	50	61	67	62	41	38	42	38	48	55	56	59	54	55	
	Minimum	49	47	54	58	59	62	61	42	37	38	33	28	16	13	20	32	37	36	42	41	35	34	34	28	31	36	44	36	40	36	
Kidder §§	Maximum	68	69	78	74	77	78	75	59	58	59	40	32	23	27	27	55	50	62	70	61	37	37	42	35	45	58	57	58	54	54	
	Minimum	43	42	49	50	49	50	58	56	32	43	35	29	21	8	8	13	28	26	38	55	34	34	34	25	22	30	34	30	29	32	
Lexington §§	Maximum	75	71	78	77	80	78	76	58	58	63	43	34	26	31	36	55	51	60	67	66	40	40	44	37	47	55	57	60	55	56	
	Minimum	39	37	48	51	53	60	62	57	35	43	34	32	25	10	15	25	34	26	40	40	35	36	35	27	23	35	43	35	38	31	
Maryville §§	Maximum	65	69	79	72	75	75	64	42	56	52	35	29	20	21	32	49	46	60	65	54	36	34	40	34	49	58	53	59	51	55	
	Minimum	36	37	37	45	47	47	50	40	31	32	30	24	14	4	6	11	24	26	26	32	32	32	31	22	22	26	36	23	25	27	
Oregon	Maximum	67	63	79	72	75	75	71	68	54	62	52	40	25	25	30	50	46	59	62	54	43	35	40	40	45	56	55	55	50	55	
	Minimum	42	37	48	50	52	60	54	37	31	39	28	24	14	7	10	23	28	27	35	32	33	31	28	23	22	33	40	26	33	28	
St. Joseph	Maximum	70	69	79	75	78	76	73	68	57	56	38	30	27	26	33	53	48	61	67	59	37	36	41	37	47	57	55	58	52	56	
	Minimum	45	38	51	51	55	61	59	38	35	38	30	27	14	12	17	28	32	30	39	35	36	34	33	26	27	37	37	30	37	32	
Trenton	Maximum	65	62	72	70	72	75	71	70	54	55	44	31	30	26	30	49	51	55	59	55	53	40	41	38	44	54	55	54	51	53	
	Minimum	38	37	44	50	50	55	59	42	34	39	34	30	20	9	13	22	30	24	35	32	34	35	35	26	24	31	41	29	36	34	

… etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged … the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
0.5
1
2
4
6
8
F

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

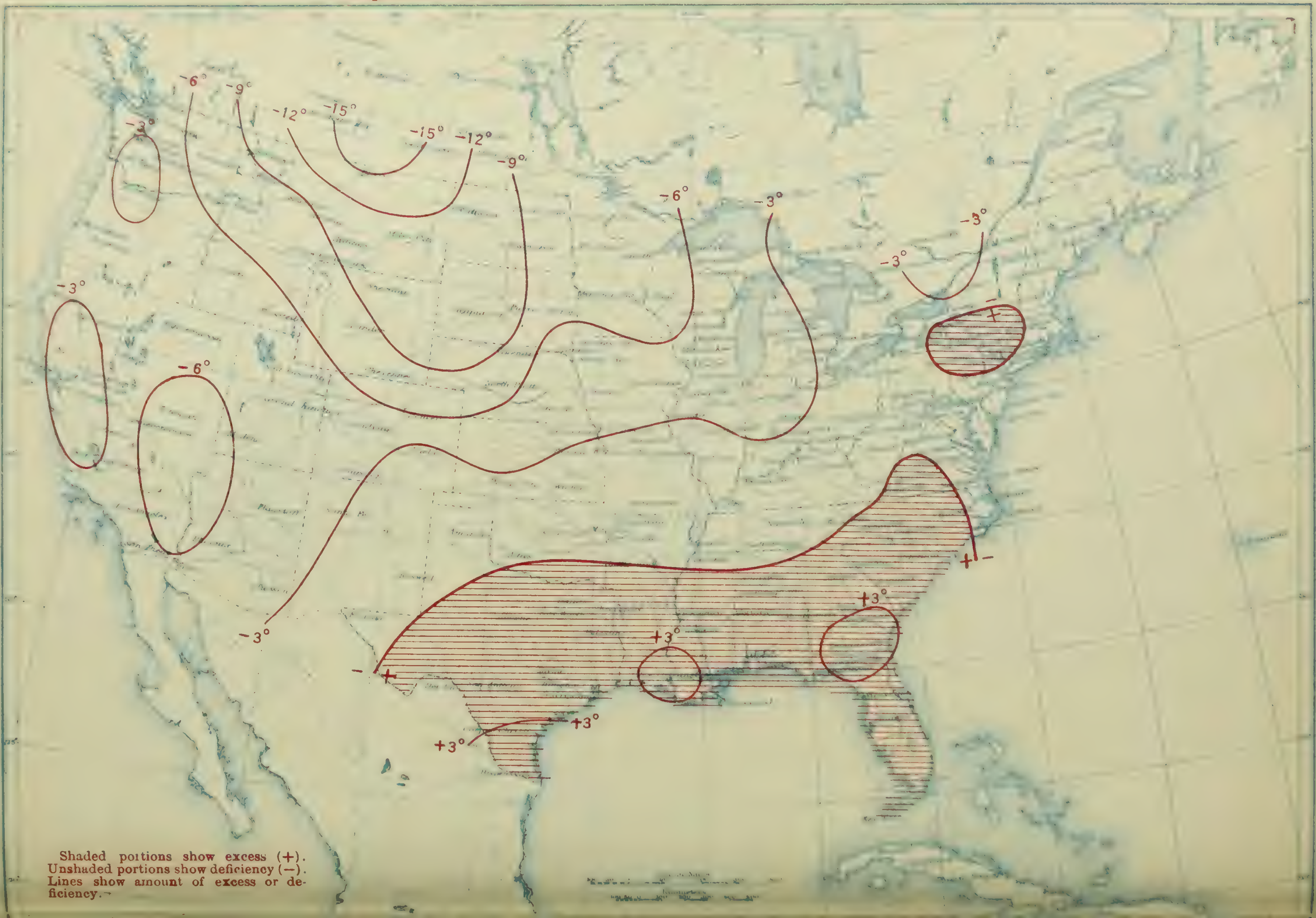
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

DECEMBER, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JANUARY 17, 1917.

Departure of the Mean Temperature from the Normal, December, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

. XX. COLUMBIA, MO., DECEMBER, 1916. No. 12.

GENERAL SUMMARY.

ecember, 1916, was mostly unfavorable for outdoor work; ding especially being much handicapped by low tempera- s after the first week. Two cold waves swept over the State, first on the 14th and 15th, and the second on the 21st and ; but there were no severe storms to seriously interfere with fic along either the rail or country roads.

he first week was mild and pleasant, with night tempera- s running above the freezing point and day temperatures erally above 60°. From about the 8th to the 23d freezing ditions prevailed, zero temperatures being more or less gen- on the 14th and 15th, and the 21st and 22d. The weather colder in the Ozark plateau than in the northern half of State, principally because the snows in the former section heavier and remained on the ground longer.

he precipitation was deficient in the northern half of the e and southwest plain, but exceeded the normal in the rk plateau and southeast lowlands, a considerable part of ch was snow. Precipitation was more or less general on 7th and 8th, except in the northwest plateau, the heaviest ng in the southeast lowlands; on the 11th and 12th it was eral in the northeast plain only; on the 14th it was mostly fined to the Ozark plateau and southeast lowlands, and on 24th, 25th, and 26th the heaviest precipitation fell in the last named sections.

heat at the close of the month was in fair condition, al- ugh in the northern half of the State it had but little snow ection. As a rule the plant is small, and made very little wth during the month. In a few localities the grain is not up. Stock is standing the winter well. It is reported fruit trees are uninjured thus far by the cold, although re is grave doubt about peach trees along the Ozark ridge, re temperatures ranged from 10 to 29 degrees below zero.

TEMPERATURE.

he monthly mean temperature for the State, as shown by records of 66 stations, was 31.3°. The mean departure n the normal for 58 stations having 10 or more years' record minus 2.3°. During the past 28 years ten Decembers have n colder than the present month. The first week was mild pleasant, but the remainder of the month, except three or r days during the last decade, was colder than normal. ring the first week the day temperatures ranged from 60° to ve 75°. On the 15th and 22d zero temperatures obtained. the Ozark plateau, and southeastern lowlands December low perature records were broken. Minimum temperatures were or lower on an average of 25 days, and zero or lower on ays.

PRECIPITATION.

he average precipitation for the State, 83 stations reporting, 1.85 inches. The departure from the normal for 69 sta- ns having 10 or more years' record was minus 0.29 inch. re was an excess of moisture in the Ozark Plateau, and theastern lowlands, but in the three other divisions it was icient. The snowfall was unusually heavy in the Ozark teau and also in the southeastern lowlands, the total month- fall averaging about 10 inches in the former and nearly 6 hes in the latter section; in the northern half of the State average fall was under 2 inches. The heaviest monthly amount reported was 16.7 inches, at Springfield; all along the ridge of the Ozarks the monthly amounts exceeded 10 inches. The greatest local monthly precipitation was 7.08 inches, at Cape Girardeau, and the least was 0.19 inch at Chillicothe.

The average number of days with 0.01 inch or more precipitation was 6.

WIND.

The prevailing winds were from the northwest. The month was rather more blustery than usual, the average hourly velocity, 8 stations equipped with anemometers reporting, was about 11 per cent above normal. Fresh to strong winds prevailed on the 7th, 12th, 15th and 26th.

SUNSHINE AND CLOUDINESS.

There were 15 clear days, 6 partly cloudy, and 10 cloudy days. The average number of hours of sunshine, 6 regular stations reporting, was or about 55 per cent of the possible, and 7 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs—December 3d, 4th, 26th, 30th and 31st. *Halos, solar*—December 2d, 14th, 17th, 21st, 22d and 23d. *Halos, lunar*—December 3d, 4th, 5th, 9th, 10th and 29th. *Sleet* December 8th, 20th, 23d and 31st. *Thunderstorms*—December 4th, 7th, 23d, 25th and 26th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.02	74	......	145	49	6,856	9.2	30	w.	15
Hannibal	30.02	77	......	......	......	7,155	9.6	33	nw.	15
Kansas City	30.01	74	63	180	61	9,267	12.5	37	nw.	15
St. Joseph	30.01	80	62	156	54	6,942	9.3	31	nw.	12
St. Louis	30.02	76	66	162	55	10,815	14.5	42	s.	7
Springfield	30.02	83	67	163	54	9,261	12.4	37	w.	12
Cairo, Ill	30.05	80	67	......	......	7,521	10.4	34	se.	26
Keokuk, Iowa	30.06	77	73	161	55	6,554	8.1	33	w.	15

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	35.9	+1.7	70	0	2.29	+0.24	.....	.....	6	....	....	....
1889	46.8	+12.6	78	2	0.96	−1.09	.....	.....	5	....	....	....
1890	35.0	+1.8	76	− 3	1.03	−1.02	.....	.....	3	....	....	....
1891	39.8	+5.6	72	− 1	1.90	−0.15	.....	.....	6	....	....	....
1892	29.4	−4.8	75	−22	2.38	+0.33	3.08	4.8	6	8	7	16
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+2.5	75	− 7	2.13	+0.08	3.01	1.3	5	14	8	9
1895	34.3	+0.1	69	− 8	6.13	+4.08	6.95	3.4	8	9	8	14
1896	38.6	+4.4	79	− 5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	−4.9	74	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	−5.5	74	−20	1.69	−0.36	2.50	5.1	5	17	6	8
1899	30.4	−3.6	72	−13	2.11	+0.06	1.70	6.6	9	12	9	10
1900	35.6	+1.4	68	− 3	0.69	−1.36	1.08	0.6	4	14	8	9
1901	28.5	−5.7	71	−29	2.93	+0.88	4.43	6.9	8	11	7	13
1902	30.7	−3.5	68	− 7	2.91	+0.86	2.50	3.1	8	10	4	7
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	−0.9	66	− 2	1.45	−0.60	2.24	1.7	4	18	6	7
1906	36.1	+1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	37.7	+3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.4	+4.2	80	− 4	0.85	−1.20	1.35	T.	3	16	7	8
1909	24.9	−9.3	76	−17	2.86	+0.81	2.50	7.7	8	12	6	13
1910	31.2	−3.0	67	− 5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+2.5	74	−11	2.80	+0.75	2.06	5.1	7	13	6	12
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+4.9	74	− 3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	−7.1	68	−18	2.48	+0.31	2.30	6.6	9	7	5	19
1915	34.7	+1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13
1916	31.3	−2.3	82	−29	1.85	−0.29	3.40	4.4	6	15	6	20

Climatological data for December, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 in. or more of precip.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	621	39	.....	.....	.....	.....	.....	.....	.....	0.68	−1.38	0.32	1.0	7	19	1	11	nw.	C. [illegible]
Brunswick	Chariton	652	36	28.8	−3.3	71	7	−6	22	36	0.31	−1.12	0.24	T	2	12	3	16	n.	Louis Benecke.
Clifton Hill	Randolph	731	....	30.0	......	68	7	−5	21	39	0.55	......	0.38	T	6	11	15	5	...	L. S. Hanna.
Columbia	Boone	784	26	29.8	−3.1	66	7	0	22	33	1.66	−0.35	1.14	1.9	9	9	9	13	se.	U. S. Weather Bureau.
Fayette	Howard	725	31	30.6ᵇ	−1.5	67	1	−5	21	38	0.68	−1.09	0.60	0.5	3	.....	.....	.....	.....	Prof. T. B. Smith.
Glencoe	St. Louis	479	....	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.80	0.3	3	16	10	5	n.	Van R. Neel.
Gorin	Scotland	700	27	.....	.....	.....	.....	.....	.....	.....	0.47	−1.42	0.27	1.5	4	7	6	18	nw.	J. W. Putnam.
Hannibal	Marion	534	23	27.9	−3.4	66	7	−6	21	35	1.59	−0.06	0.80	3.3	9	9	12	10	sw.	U. S. Weather Bureau.
Hermann	Gasconade	519	42	.....	.....	.....	.....	.....	.....	.....	0.64	−1.20	0.31	0.9	9	14	6	11	ne.	C. T. [illegible]
Jefferson City	Cole	628	30	30.2	−2.9	70	3	−1	22	37	2.53	+0.58	1.50	1.6	8	19	4	8	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	.....	.....	.....	.....	.....	.....	.....	0.64	......	0.26	0.2	6	.....	.....	.....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	32.1	1.4	70	4	−4	15†	38	1.65	−0.21	0.55	3.0	7	11	11	9	nw.	J. T. Farrel.
Macon	Macon	881	18	26.8	−3.9	69	7	−8	21†	38	0.42	−1.13	0.21	T.	3	16	7	8	sw.	John A. Cook.
Mexico	Audrain	797	38	28.0	−4.2	67	7	−3	22	37	1.79	−0.33	1.14	1.8	10	16	0	15	nw.	J. F. Llewellyn.
Oakfield‡‡	Franklin	793	24	33.8	−0.9	72	3†	−4	22	41	0.99	−1.03	0.56	3.0	7	6	12	13	nw.	E. E. Steines.
Pacific	Franklin	467	....	.....	.....	.....	.....	.....	.....	.....	1.04	......	0.70	3.0	7	18	0	13	nw.	Wm. Dieter.
Palmyra	Marion	652	4	25.6	−1.6	67	7	−8	21†	41	1.17	−0.81	0.48	0.5	5	15	9	7	sw.	W. B. Markell.
St. Catherine	Linn	914	3	27.2	......	67	7	−10	21†	40	0.51	......	0.24	2.0	7	10	12	9	nw.	L. D. Baker.
St. Charles	St. Charles	614	38	33.4	−1.6	72	4	−2	22	42	0.80	−1.15	0.58	0.2	4	8	12	11	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	33.6	−1.9	71	4	2	15	36	2.16	−0.07	1.06	2.5	8	12	7	12	s.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	32.6	......	72	4	2	15†	34	2.26	......	0.93	1.9	9	6	12	13	nw.	St. Louis University.
Steffenville	Lewis	576	23	29.1	−1.3	72	3	−9	21†	37	1.23	−0.48	0.36	3.0	8	6	14	11	w.	Frank Hall.
Union	Franklin	568	....	.....	.....	.....	.....	.....	.....	.....	0.99	......	0.50	......	9	12	9	10	nw.	J. Wm. Keller.
Unionville	Putnam	1,072	23	23.1	−4.3	69	3	−15	21	37	1.05	−0.66	0.34	5.0	7	21ᵃ	2	7ᵃ	n.	Geo. W. Davis.
Valley Park	St. Louis	430	....	.....	.....	.....	.....	.....	.....	.....	1.60	......	0.95	1.6	7	14	3	14	nw.	J. H. Lucksinger.
Warrenton	Warren	865	25	28.8	−3.5	68	3†	−1	15†	41	0.80	−1.37	0.32	2.2	10	5	14	12	nw.	Prof. J. H. Frick.
Section means and extremes				29.5	−2.6	72	3†	−15	21	42	1.12	−0.75	1.50	1.6	7	12	8	11	nw.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	.....	.....	.....	.....	.....	.....	.....	7.08	......	2.80	7.0	9	18	1	12	e.	D. L. Albert.
Cardwell ††	Dunklin	225	5	.....	.....	.....	.....	.....	.....	.....	.....	......	.....	.....	..	.....	.....	.....	.....	F. E. Tate.
Caruthersville	Pemiscott	220	25	40.4	+0.6	76	4	3	15	34	4.42	+0.12	1.87	6.5	8	18	3	10	e.	H. E. Averill.
Doniphan	Ripley	440	11	37.3	−0.2	75	4	−3	15†	39	5.05	+2.24	2.15	7.0	7	17	3	11	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	36.2	−0.6	75	4	−23	15	48	2.30	−0.98	1.70	10.0	5	9	9	13	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	34.8	−1.1	75	4	−10	15	44	7.00	+3.84	3.40	6.0	9	14	10	7	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	.....	.....	.....	.....	.....	.....	.....	4.03	−0.19	1.98	3.5	13	13	4	14	sw.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	.....	.....	.....	.....	.....	.....	.....	1.15	......	2.20	3.5	5	18	0	13	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	35.0	−2.2	72	7	−17	15	56	4.96	−1.24	3.10	6.0	8	22	2	7	...	Miss Belle Kinne.
Sikeston ††	Scott	328	15	37.2	−0.9	74	4	4	15	36	5.74	+1.90	2.37	4.3	8	17	6	8	n.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	37.7	−0.8	74	4	3	15	31	4.46	+1.13	2.03	3.3	9	13	9	9	n.	U. S. Weather Bureau.
Section means and extremes				36.9	−0.7	76	4	−23	15	56	4.92	−1.16	3.40	5.8	8	16	5	10	s.	
Ozark Plateau.																				
Arlington	Phelps	767	14	.....	.....	.....	.....	.....	.....	.....	1.00	−0.56	0.35	....	7	18	1	12	nw.	G. V. Randolph.
Birchtree	Shannon	1,200	22	35.2	−0.6	73	4	−8	15	40	4.09	+1.59	2.05	7.5	8	23	3	5	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	32.3	−3.5	70	4	−8	22	36	3.05	+0.58	1.40	6.0	4	18	5	8	s.	A. C. Fink.
Cassville	Barry	1,500	5	33.1	......	34	3	−29	15	67	2.73	......	0.56	13.0	6	20	2	9	n.	Mrs. Zuma Bloomer.
Crocker ††	Pulaski	1,300	5	34.0	......	69	4	−8	20	31	0.34	......	0.23	6.0	2	18	1	12	n.	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	35.2ᵃ	−2.7	73	3	−20	22	61	2.53	−0.47	1.28	9.5	5	21	3	7	ne.	H. E. Dean.
Eldon	Miller	934	15	31.0	−3.6	74	3	−5	15†	38	1.79	0.54	0.90	2.0	7	13	7	11	ne.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	36.0	......	74	4	−9	21	44	4.36	+1.40	1.50	13.0	8	16	9	6	s.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	33.3	−2.4	71	3	−10	22	38	3.11	+1.28	0.90	12.0	9	15	6	10	nw.	A. C. Leach.
Goodland	Iron	1,000	11	34.1	−0.8	71	4	−18	22	53	2.85	+0.67	1.75	11.0	4	14	6	11	s.	F. M. Adams.
Hollister	Taney	1,000	7	35.9	−3.8	82	3	−6	22	40	3.60	+0.93	1.30	10.0	5	23	0	8	nw.	W. P. Chapmann.
Houston	Texas	1,280	23	34.5	−1.5	73	3	−13	22	46	3.85	+1.73	0.81	12.5	10	16	5	10	se.	R. F. Harmon.
Ironton	Iron	925	38	32.6	−1.8	73	4	−15	15	50	5.84	+2.86	2.60	10.0	10	10	12	9	nw.	W. H. Delano.
Koshkonong	Oregon	911	15	37.6	+0.1	75	3†	2	15†	37	5.00	+1.94	2.00	10.0	6	16	5	10	nw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	31.2	−4.2	75	3	−11	22	41	1.46	−1.21	0.70	7.5	5	15	4	12	s.	Leonard E. Dickerson.
Lockwood	Dade	1,088	21	34.0	−1.9	76	3	−8	15	39	1.59	−0.37	0.58	6.5	5	16	8	7	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	32.0	−2.7	73	3	−8	22	49	2.72	+0.48	0.98	14.5	7	13	5	13	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,083	33	35.8	−0.9	71	7	−18	22	55	1.75	−0.93	0.51	11.2	7	20	4	7	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	31.0	−2.5	75	3	−6	22	45	1.84	−0.55	0.60	12.3	7	15	11	5	sw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	33.2	−2.3	74	3	−6	22	34	2.07	0.60	0.68	16.7	10	16	5	10	se.	U. S. Weather Bureau.
Steelville	Crawford	755	15	.....	.....	.....	.....	.....	.....	.....	1.81	−0.04	0.84	8.9	9	19	2	10	sw.	Thomas D. Slater.
Section means and extremes				33.8	−2.2	82	3	−29	15	67	2.71	+0.43	2.60	10.0	7	17	5	9	s.	
Southwest Plain.																				
Amoret	Bates	850	7	30.5	......	70	3	−8	15	40	1.66	......	0.63	10.3	6	9	5	17	nw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	32.2	−2.1	67	2†	−7	15	36	0.86	−0.98	0.33	5.7	6	10	11	10	sw.	W. G. Bigelow.
Clinton	Henry	800	29	33.4	−1.1	74	3	−9	22	59	0.35	−1.51	0.20	3.5	3	9ᵃ	12ᵃ	8	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	27.7	−3.5	67	3	7	22	37	0.81	−1.10	0.28	4.5	6	9	6	16	nw.	A. J. Sharp.
Lamar	Barton	964	35	32.8	2.7	75	3	−9	15	46	1.54	−0.43	0.68	2.0	4	19	3	9	se.	Dick B. Houston.
Lamonte	Pettis	863	27	29.8	......	65	4	6	22	41	0.50	1.34	0.40	1.0	2	12	10	9	sw.	J. Ed. Hall.
Marshall	Saline	779	25	30.0ᵃ	−1.3	70	7	−3	21†	41	0.35	−1.44	0.30	0.2	3	14	8	9	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	33.8	−0.2	71	3	−3	15	33	1.76	−0.26	0.75	8.0	5	15	9	7	nw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	29.7	−4.1	69	7	−2	15†	33	0.47	−1.40	0.19	0.8	7	16	8	7	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	32.5	−2.8	75	3	−9	15	45	1.87	−0.52	0.75	6.5	7	16	9	6	s.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	.....	.....	.....	.....	.....	.....	.....	0.87	......	0.43	0.2	5	18	1	12	sw.	John W. Cauthorn.
Section means and extremes				31.2	−2.2	75	3	9	15†	59	1.00	−1.00	0.75	3.9	5	13	8	10	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	30.0	−0.5	68	3	−8	21	27	0.80	−0.93	0.45	0.2	3	14	7	10	nw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	23.1	−8.1	62	3	−15	21	35	0.22	−1.33	0.20	2.0	3	11	13	7	nw.	M. H. Moulton.
Chillicothe ††	Livingston	....	1	.....	.....	.....	.....	.....	.....	.....	0.19	−1.84	0.17	T.	2	16	2	13	......	Hocey O. Dupy.
Conception	Nodaway	982	31	23.9	−5.8	65	4	−16	21	33	0.57	−0.51	0.37	2.0	4	12	15	4	nw.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	.....	.....	.....	.....	.....	.....	.....	0.27	−1.35	0.18	0.3	5	13	9	9	nw.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	25.0	−3.0	65	4	−16	21	33	0.70	−0.57	0.25	4.5	4	18	3	10	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	29.9	−1.6	66	4	−3	21	32	0.34	−1.02	0.18	0.9	9	13	10	8	nw.	U. S. Weather Bureau.
Kidder	Caldwell	1,017	25	29.0	−0.5	69	7	−11	27	29	0.43	−0.99	0.25	0.5	2	19	4	8	nw.	J. F. Sharp.
Lexington	Lafayette	813	34	30.4	−1.3	66	3	−4	21	30	0.28	−1.59	0.09	0.5	4	16	0	15	n.	J. W. Keithley.
Liberty	Clay	861	27	29.5	2.4	67	3	0	20†	34	0.24	−1.25	0.22	0.2	2	24	2	5	ne.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	23.0	−3.4	66	4	−17	22	45	0.55	−0.67	0.40	1.2	3	17	6	8	nw.	J. R. Brink.
Oregon	Holt	1,113	60	21.8	3.7	65	4	−14	21	32	0.49	−1.03	0.32	1.3	4	15	7	9	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	27.0	......	66	4	−9	21	32	0.48	−0.55	0.36	0.6	7	12	12	7	nw.	U. S. Weather Bureau.
Tarkio	Atchison	1,150	4	24.6	0.6	67	4	−16	21	35	0.97	−0.01	0.73	2.0	5	22	3	6	nw.	John F. Fraser.
Trenton	Grundy	812	21	26.2	3.6	59	3†	−12	21	31	0.41	−1.14	0.26	1.0	5	13	7	11	s.	W. H. Estes.
Section means and extremes				26.8	−2.9	69	7	−17	22	45	0.46	−0.98	0.73	1.1	4	16	6	9	nw.	
State means and extremes				31.3	−2.3	82	3	−29	15	67	1.85	−0.29	3.40	......	6	15	6	10	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports [illegible] used to determine the section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† And on other dates. †† Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mt. Vernon, Aurora, R. F. D. No. 1

Daily precipitation for December, 1916.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
ile	Missouri								.06			.04	.03		T.				.03			T.			.04		.32	.16					0.68
ick	Grand								.07					T.					T.			T.			T.		.24						0.31
Hill	Chariton					.03		.05																	.03	.01	.38					.05	0.55
ia***	Missouri							1.13	.01		.04	.11	.01	T.	.03	T.		.01			T.			T.	T.	T.	.31					.01	1.66
	do							.03					.05					T.									.60						0.68
	do																																...
	Meramec								.80			T.			T.			T.	.03		T.		T.				T.	.10					0.93
	Mississippi							.05				T.	T.							.05					.10		.27					T.	0.47
al**	do		T.				T.	.48	.33		T.	.02	.08			T.				T.	.04			.03	.04	.08	.49					T.	1.59
nn	Missouri			T.					.31	.02		.04	.01	T.	.01	T.			.03			T.			.01		.09	.12					0.64
n City ‡	do								1.50			.05	.01		.05				.10			.05					.10	.67				T.	2.53
ille	Chariton							.26	T.			T.	T.			T.		.02				T.			.02	.10	.20					.04	0.64
na	Mississippi							.55	.50			.04	.03								.01				.11		.41						1.65
	Chariton								.10			T.		T.							T.				.11		.21						0.42
	Mississippi								1.14	.03		.02	.05	.05		.01			T.		T.	.02			.06		.36	.05					1.79
	Meramec							.11	.56			T.			.04				.02		.02	.02			T.		.22					T.	0.99
	do								.70							.05			.05			.05	.10	.05				.04					1.04
a	Mississippi			T.					.43			T.										.05			.09		.48	.12					1.17
erne	Grand				.01			.24				T.	.02	T.		T.		T.		T	.01				.07	T.	.15					.04	0.54
les	Missouri							.10		T.			T.								.02	T.			T.	.58	.10						0.80
s (1)***	Mississippi		T.		T.			.37	.57		T.	.02	T.		.07	T.		T.	T.		.02	.04		.01	T.		1.06					T.	2.16
s (2)	do		T.					.59	.54			.01	T.		.06				T.		.05	.04		T.	.03		.93					.01	2.26
ille	do						T.	.15	.15			.10	.16	.07	.20						.04							.36				T.	1.23
	Meramec								.50	.01			.01			.05			.03			.01	.01				.08	.29					0.99
lle	Grand								.25			.11		.10		T.				T.	.15				.10		.22	.12					1.05
Park	Meramec								.95	.05			T.	T.	T.	.02			T.	T.	T.	.01	.01		T.		.16	.40					1.60
ton	Mississippi								.32	.06		.05	.08	.02		.04			.02			.01			T.		.10	.10					0.80
ast Lowlands.																																	
rardeau	Mississippi					.20			2.80	.25					T.	.20			.20		.03		.30				.30	2.80					7.08
d.	do																																....
rsville	do				.03				1.23			T.			.26				.11		.01	T.	.06				.85	1.87				T.	4.42
an	Black						T.	.45	2.15			T.			.50		T.		.10			.15					1.65	.05				T.	5.05
	Mississippi				.20			.06							.19							.15					1.70						2.30
Hill	do								3.40	.05	.05	T.			.40		.25		.20			T.			.70		.90	1.05					7.00
adrid	do				T.	.10			.80	.16					.05	.20			.07	.01	.05	.19	.20				.20	1.98		.02			4.03
(near)	do								2.20					.25				.10									.30	1.30					4.15
Bluff	Black				T.				3.10	.08			T		T.	.29			.08		.12		.23				.43	.63	T.				4.96
n	Mississippi				.64	T.			2.37			T.			.57				.17		.14		.09				1.08	.68					5.74
ill.**	do				.05		T.	.93	1.10					T.	.14				.08		.04	.06					2.01	.02				T	4.46
Plateau.																																	
on	Gasconade								.35	T.			.04		.05	.08			.10			T.	.11					.27					1.00
e	Black							.63	2.05						.12				.05			.30					.77	.12				.05	4.09
	Osage							1.40									.50		.10								1.05						3.05
ne	White							.52	.56						.54							.36					.37					.38	2.73
r	Gasconade											T.			.23						.11											T.	0.34
	Neosho							.27	.03				T.		.40				T.			.55										1.28	2.53
	Osage							.90	.45			T.	T.		.07			.02	.05		T.	T.					.27					.03	1.79
ty	Black							.63	1.50						.50				.20			.30	.30				.73	.20				T.	4.36
	Meramec							.30	.90			.06			.40				.21			.44	.06				.71					.06	3.14
nd	Black								1.75						.40			.20				.50											2.85
er	White							1.00	1.30						.50							.50					.30						3.60
e	Gasconade							.39	.70			.05			.50		.30		.10	.10		.50			.40		.81					T.	3.85
n	Mississippi			T.	T.				2.60	.07			T.		.02	.25			.10		T.	.10	.45				.25	1.95				.05	5.84
onong	Black							.88	2.00			T.			.40				.20			.40					1.12					T.	5.00
n	Osage			T.						T.		T.			T.	.22			.18				.20				T.	.70			T.	.16	1.46
od	do							.19	.24						.48				.10								.58					T.	1.59
ain Grove	White								.98	T.					.09	.30			.03			T.	.38				.12	.82					2.72
	Neosho							.51	.10						.28				.02			.27					.51					.06	1.75
	Meramec								.53			T.	.03		.06	.15			.22		T.	T.	.25					.60					1.84
eld**	White				.01			.60	.08			T.		.08	.31			.02	.04		T.	.40					.41	T				.12	2.07
lle	Meramec								.84	.08			.04		.03	.03			.02				.45				.15	.17					1.81
west Plain.																																	
t	Osage						T.		T.			.50			.03			.10	.20								.63					T.	1.46
on City	do							T.	T.		T.	.02			.20				.23		.02				T.	T.	.33					.06	0.86
	do													.20	.05			.10															0.35
onville ‡	do									T.		.05			.05				.18			.06					.28	.19					0.81
	Neosho								.57			T				.21			.08							.68							1.54
ite	Missouri							T.	T.			T.	T.					T.	.10		T.					T.	.40					T.	0.50
all	do							T.							T.			T.			.02				T.	.30						.03	0.35
a	Osage							.15							.40				.40								.75					.06	1.76
nsburg	Missouri							.19	T.			.02	T.		.02			.04			T.					.04	.12					.04	0.47
n	Osage							.32	.05		T.	.15		T.	.20			.15	.25	T.	T.	T.					.75					T.	1.87
rly	Missouri								.29			T.	T.	T.					.04						.04		.43	.07					0.87
west Plateau.																																	
n	Grand																	.10								.45						.25	0.80
ty	do							T.				.01	T.					T.		.01					T.	T.	.20					T.	0.22
the	do													T.						T.					T.		.17	.02					0.19
ption	Missouri										T.		.05							.10							.37					.05	0.57
	Grand				T.							.02	T.					.02		T.	.01				T.	T.	.18					.04	0.27
City	do										T.		.10							.25							.25					.10	0.70
City**	Missouri													.02	.01				.05		.01			.03	.01	.05	.13					.03	0.34
	Grand				T.							.25						T.	T.						T.		.18						0.43
gton	Missouri																T.		.05			T.			.07		.07	.09					0.28
ty	do												T.					.02		T.	T.					T.	.22					T.	0.24
lle	do										T	T.							T.	T.	.10				.05		.40						0.55
	do											.02	T.					.08		T.					T.		.32					.07	0.49
p**	Missouri										.01	T.	T.					.04		.01					.01	.09	.27					.05	0.48
	do												.02					.02			.10				T.		.73					.10	0.97
on	Grand							T.			T.		.02					T.		.03					.04	.26	T.					.06	0.41

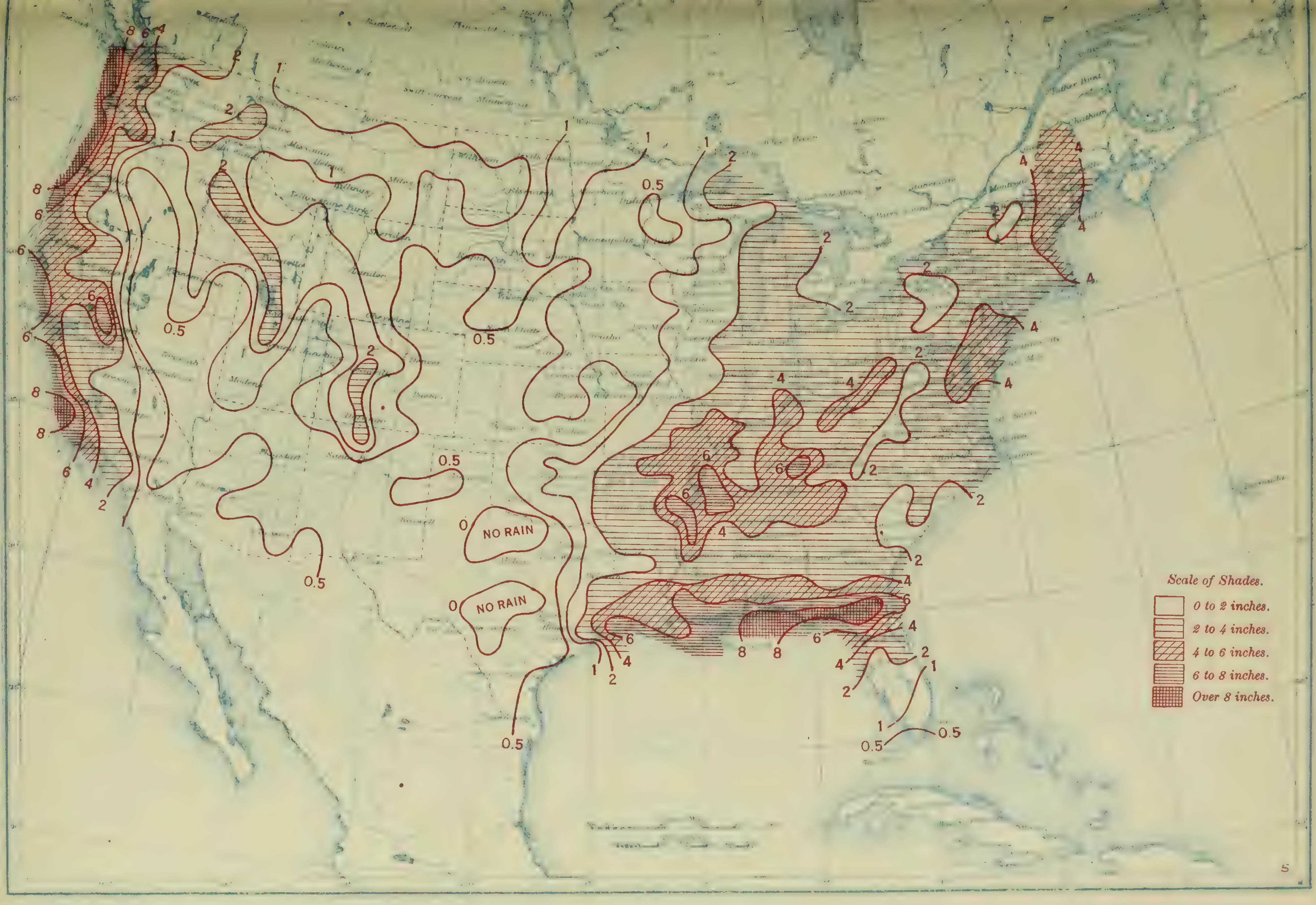
Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. gular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded.

Daily temperatures for December, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	62	62	69	57	61	63	71	45	45	40	29	21	21	21	32	53	38	29	33	21	12	29	36	37	43	52	33	36	42	29	31
	Minimum...	30	33	34	45	40	32	35	28	16	18	28	10	2	2	4	9	22	8	8	2	5	6	12	15	21	25	17	16	10	13	16
Columbia	Maximum...	55	63	65	62	56	60	66	36	41	39	32	25	15	16	23	50	37	29	38	14	8	28	34	40	42	34	31	33	29	35	39
	Minimum...	32	35	47	52	35	38	36	25	20	28	19	7	2	2	2	17	27	13	12	6	1	0	21	26	24	31	21	21	16	18	23
Fayette	Maximum...	67	64	60	59	58	60	65	34	41	37	30	22	16	16	24	54	37	25	36	8	..		36	40	51	..					...
	Minimum...	35	32	43	50	35	31	34	22	17	26	16	7	1	3	16	16	22	8	7	3	-5	..	20	21	30	..					
Hannibal	Maximum...	55	56	63	65	56	58	66	38	39	39	32	24	17	12	17	48	34	26	36	10	4	27	30	39	37	50	34	29	25	32	39
	Minimum...	31	28	41	51	30	28	38	26	21	27	24	11	1	1	1	13	23	8	10	4	-6	-4	29	22	20	34	23	19	17	19	16
Jefferson City §§	Maximum...	58	66	70	67	57	65	68	31	41	40	30	29	18	17	35	48	36	30	42	15	10	28	36	42	48	55	39	34	34	36	47
	Minimum...	30	30	33	48	42	31	34	28	19	23	29	9	4	5	0	15	27	13	14	9	4	-1	4	17	24	29	23	21	19	19	20
Macon §§	Maximum...	56	60	68	59	57	60	69	30	41	41	29	23	18	13	26	49	38	28	33	11	5	27	35	34	39	51	30	30	28	34	39
	Minimum...	28	30	31	40	39	34	35	25	16	16	20	9	0	0	1	11	21	7	6	1	-8	-8	-3	15	17	19	16	14	7	7	13
Mexico §§	Maximum...	58	61	64	66	57	61	67	31	39	40	30	24	18	13	21	50	37	31	37	13	8	22	38	39	41	52	31	34	28	34	37
	Minimum...	29	29	32	52	40	30	33	29	19	25	24	9	0	1	1	13	22	12	11	5	-1	-3	1	21	21	22	21	17	13	15	14
Oakfield	Maximum...	60	62	72	72	60	60	68	60	41	40	36	39	27	17	26	53	48	32	41	40	13	26	34	48	42	57	54	36	30	38	43
	Minimum...	36	36	53	58	42	36	53	26	19	21	23	15	5	7	-2	12	28	15	20	10	6	-4	18	30	25	35	25	28	19	26	21
St. Catharine	Maximum...	56	61	65	59	57	57	67	45	41	41	36	24	21	15	20	50	40	31	31	10	6	26	25	33	37	49	41	32	26	34	33
	Minimum...	31	34	34	43	35	32	14	24	18	23	22	8	-2	0	1	10	17	5	9	-2	-10	-10	11	25	14	33	13	12	6	13	16
St. Louis (1)	Maximum...	58	60	68	71	59	57	69	58	38	38	36	30	20	19	26	52	38	30	40	23	12	21	36	47	38	58	46	35	31	34	40
	Minimum...	40	41	49	58	45	39	50	29	24	28	21	17	7	7	2	16	27	19	23	10	8	2	18	30	26	37	29	26	22	22	24
Unionville §§	Maximum...	56	58	69	58	55	58	62	31	44	42	26	20	12	10	20	44	35	28	24	6	0	20	28	30	36	50	26	25	27	34	30
	Minimum...	30	29	32	36	35	34	35	24	15	16	22	4	4	-6	4	8	20	4	5	-7	-15	13	-8	5	14	14	12	12	4	2	8
Warrenton §§	Maximum...	56	60	68	67	55	60	68	31	38	39	30	26	16	13	24	47	37	30	38	14	9	26	41	43	45	56	30	34	28	34	41
	Minimum...	33	35	35	49	41	33	35	30	18	20	26	11	2	1	-1	9	24	14	14	8	3	-1	0	20	21	22	24	18	16	15	16
Southeast Lowlands.																																
Cardwell	Maximum...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Caruthersville	Maximum...	54	66	66	76	67	67	74	66	46	49	43	40	36	25	32	51	53	43	46	46	24	32	41	56	55	65	65	50	44	46	55
	Minimum...	33	37	52	61	44	39	49	33	26	26	32	22	22	20	3	17	27	27	19	24	17	7	20	31	31	46	48	31	28	26	29
Doniphan	Maximum...	62	63	67	75	68	61	69	62	41	42	41	40	36	26	36	49	44	40	45	41	24	27	38	53	47	64	65	49	39	45	49
	Minimum...	28	28	50	61	45	29	55	33	22	20	29	18	16	18	-3	11	19	24	17	22	14	-3	16	35	26	42	34	28	25	22	26
Jackson	Maximum...	64	64	62	75	67	61	72	68	58	52	40	35	35	35	25	48	46	41	43	40	30	28	25	55	48	60	60	55	54	51	47
	Minimum...	27	26	47	58	39	26	46	29	22	21	32	31	14	15	-23	0	26	18	7	16	11	-4	-4	31	24	37	34	21	24	21	31
Marble Hill	Maximum...	55	66	63	75	70	62	72	60	40	49	40	40	33	34	29	49	54	38	44	39	22	20	36	51	48	60	61	41	39	40	46
	Minimum...	27	26	50	40	32	25	42	29	20	18	31	20	11	10	-10	5	20	26	15	17	12	-5	8	30	25	35	39	25	25	20	20
Poplar Bluff §§	Maximum...	64	65	70	59	64	64	72	48	45	45	41	42	32	25	39	51	47	36	46	41	24	31	41	65	50	65	50	44	41	48	50
	Minimum...	26	28	30	43	29	30	30	41	21	20	22	18	17	16	-17	10	17	23	22	24	17	-9	10	19	25	27	37	27	24	21	21
Ozark Plateau.																																
Birchtree	Maximum...	65	64	71	73	62	59	65	55	42	42	36	39	33	22	32	53	48	39	44	41	17	26	37	5	54	62	57	42	40	43	47
	Minimum...	32	32	40	50	45	37	51	28	18	22	25	12	10	14	-8	13	23	13	18	16	9	-7	18	30	26	41	32	23	18	20	24
Cassville	Maximum...	64	71	74	70	61	64	66	57	44	40	37	39	33	24	38	38	44	41	47	40	16	6	32	47	53	58	47	43	41	41	41
	Minimum...	30	27	47	55	35	32	5	27	17	21	21	14	9	11	-29	8	14	18	22	14	6	-25	5	21	24	45	14	23	36	21	21
Eldon	Maximum...	59	67	74	65	58	62	67	47	41	41	38	30	21	16	27	39	37	31	44	20	10	25	36	43	47	54	44	3	34	37	42
	Minimum...	36	29	43	49	38	31	44	26	16	23	18	8	2	0	-5	13	26	9	18	7	0	-5	16	35	23	49	22	25	14	14	19
Fruit City	Maximum...	65	65	70	74	62	62	67	59	42	43	39	37	32	23	33	53	45	44	44	40	24	28	34	53	48	63	62	42	39	45	58
	Minimum...	34	38	50	57	45	32	44	29	20	22	25	14	7	10	-4	9	29	21	19	15	-9	-5	17	29	25	41	34	22	21	20	23
Gano	Maximum...	60	64	71	70	60	60	64	59	40	41	35	35	28	21	28	51	41	35	42	36	13	28	38	48	47	57	53	36	35	38	46
	Minimum...	35	30	48	57	40	34	53	25	17	23	21	10	6	10	-5	13	27	10	17	11	5	-10	18	29	21	31	25	12	20	22	21
Hollister	Maximum...	64	70	82	74	66	60	62	52	36	42	36	42	30	32	40	50	46	36	38	30	36	40	44	56	48	56	56	44	46	50	40
	Minimum...	24	30	44	42	40	38	42	34	16	18	16	12	10	18	8	16	16	20	24	22	18	-6	28	24	28	42	24	18	20	18	22
Ironton §§	Maximum...	62	64	69	73	61	62	68	36	4	43	34	35	25	20	30	52	40	29	43	20	14	28	37	51	51	61	48	38	36	43	47
	Minimum...	28	22	48	59	45	21	54	36	18	18	29	16	9	14	-15	2	20	17	11	19	10	-14	12	25	17	37	39	22	21	17	16
Lebanon §§	Maximum...	61	68	75	67	60	65	60	32	42	42	32	36	23	16	33	47	38	28	46	16	7	29	42	46	54	52	30	38	38	40	42
	Minimum...	28	32	39	55	38	35	30	30	18	18	28	9	6	5	-8	10	22	12	9	10	4	-11	10	22	26	40	25	20	20	21	24
Mountain Grove §§	Maximum...	63	64	73	70	64	60	63	30	43	40	30	34	27	18	29	52	46	52	42	15	9	27	40	43	50	36	46	41	39	44	45
	Minimum...	29	32	36	44	40	37	44	29	18	19	24	10	7	8	-7	3	29	20	23	14	7	-8	-4	25	24	29	28	20	21	21	24
Neosho	Maximum...	54	64	67	67	58	66	71	53	46	42	39	39	38	36	35	49	45	42	49	45	16	37	47	51	53	58	49	42	44	46	42
	Minimum...	34	31	53	52	36	37	52	26	17	24	20	11	8	12	-16	13	17	16	23	11	4	-18	12	31	28	45	24	20	26	22	25
Rolla §§	Maximum...	60	65	75	68	60	62	66	30	42	40	30	32	23	15	28	54	37	28	45	15	9	30	40	46	51	52	34	40	39	43	45
	Minimum...	29	33	34	50	42	35	36	30	17	17	26	8	6	6	-4	9	26	15	14	11	5	-6	-2	23	24	26	25	19	19	21	22
Springfield	Maximum...	59	66	74	65	58	58	64	37	41	37	34	34	24	23	29	46	43	28	47	26	11	28	40	44	46	53	36	40	38	41	39
	Minimum...	38	43	53	52	43	42	37	25	21	26	14	12	5	-2	-4	24	26	16	24	11	-2	-6	22	34	35	36	25	23	25	27	29
Southwest Plain.																																
Amoret	Maximum...	50	66	70	65	60	65	65	47	39	41	33	31	26	17	32	47	44	42	42	20	13	30	33	40	45	51	40	34	36	39	37
	Minimum...	32	31	39	35	34	32	45	24	21	30	14	0	0	5	-8	17	28	7	19	4	-1	-4	18	25	22	37	17	17	18	16	22
Clinton	Maximum...	60	68	74	65	62	65	68	48	47	44	34	30	24	16	21	41	40	32	20	....	....	50	57	49	45	64	59	37	30	32	40
	Minimum...	35	32	41	50	36	32	46	28	15	21	14	21	3	6	6	21	13	6	4	....	....	-9	11	11	25	44	21	20	18	19	22
Harrisonville §§	Maximum...	56	63	67	62	58	65	66	33	45	39	26	30	17	16	29	51	35	28	38	10	7	29	38	34	49	48	30	33	32	35	36
	Minimum...	22	34	31	35	36	37	47	26	13	30	24	4	0	1	-3	14	23	3	1	3	-3	-7	1	15	21	25	17	15	15	16	16
Lamar §§	Maximum...	63	71	75	68	63	68	70	30	48	41	24	37	24	17	37	47	44	33	48	12	10	35	43	47	52	57	33	41	44	43	41
	Minimum...	29	34	42	50	39	39	50	28	18	22	22	11	5	5	-9	12	20	7	12	8	4	0	6	24	28	41	23	21	24	22	25
Lamonte	Maximum...	58	68	63	65	60	62	67	47	45	40	38	30	23	16	27	53	41	28	41	18	9	29	35	40	42	52	36	34	33	38	36
	Minimum...	32	30	36	40	32	30	46	30	14	27	21	6	3	3	-2	12	22	5	18	1	-2	-6	15	28	19	35	19	14	15	13	18
Marshall	Maximum...	56	65	59	55	57	61	70	49	43	39	56	25	22	16	25	52	48	33	37	15	7	28	34	38	....	54	55	34	30	35	36
	Minimum...	34	29	37	45	38	30	48	26	14	23	21	7	1	6	2	11	22	9	15	2	-3	-3	15	28	....	36	18	16	12	15	15
Warrensburg	Maximum...	56	56	48	54	62	68	69	38	46	41	30	30	18	16	29	53	38	30	41	17	7	28	35	37	42	53	38	34	32	32	36
	Minimum...	38	36	33	35	38	40	38	27	18	28	19	7	3	5	-2	20	27	10	16	2	-2	0	20	25	24	38	19	18	15	15	20
Warsaw §§	Maximum...	60	69	75	70	60	65	68	50	46	43	40	28	28	20	31	50	44	32	48	40	12	31	38	42	48	58	50	38	37	40	40
	Minimum...	34	21	35	54	31	25	50	29	13	21	20	9	3	8	-9	9	22	0	18	8	3	-1	17	37	20	44	20	15	21	16	17
Northwest Plateau.																																
Avalon	Maximum...	57	61	68	60	57	56	64	45	43	43	35	24	20	16	24	50	44	32	32	12	7	26	31	38	41	50	45	30	30	35	34
	Minimum...	35	31	42	45	38	34	45	30	17	25	23	11	-2	3	10	30	27	15	12	0	-8	0	12	28	22	35	15	15	12	15	28
Grant City	Maximum...	57	55	64	65	60	55	59	49	43	41	34	19	22	15	19	45	39	31	27	3	3	25	28	26	38	44	30	26	26	34	36
	Minimum...	34	33	32	40	34	32	35	20	13	23	16	10	4	-5	1	12	21	5	1	-6	-16	-8	2	20	9	30	9	10	4	11	15
Kansas City	Maximum...	58	63	60	66	60	61	63	34	47	37	29	27	17	15	31	54	36	29	35	11	11	30	36	36	43	50	30	32	30	36	37
	Minimum...	39	40	[illegible]	38	14	41	31	24	22	29	13	9	3	4	6	31	24	15	6	1	-3	5	15	24	24	24	18	21	15	19	24
Kidder §§	Maximum...	57	63	67	63	57	58	69	37	45	42	27	24	15	18	35	54	35	28	32	10	6	26	32	32	43	49	29	30	28	32	36
	Minimum...	37	34	40	42	41	37	47	25	15	23	24	8	-2	2	6	28	25	8	26	-3	-11	2	8	26	22	42	12	14	8	12	22
Lexington §§	Maximum...	58	65	66	62	60	61	64	32	45	49	30	28	18	13	28	54	36	27	35	12	8	25	33	36	40	52	32	32	33	38	36
	Minimum...	37	35	43	43	42	36	55	26	17	26	26	10	2	8	4	20	25	14	22	1	-4	0	17	20	24	37	17	15	13	13	19
Maryville §§	Maximum...	56	55	61	66	56	61	50	32	44	41	21	20	14	21	32	45	32	30	25	5	4	28	25	26	40	44	25	25	27	34	35
	Minimum...	27	29	29	35	31	32	32	21	14	13	12	4	-4	-5	-5	12	22	4	3	-7	-16	-17	1	4	10	21	8	8	4	4	9
Oregon	Maximum...	53	56	62	65	55	57	62	34	43	40	34	20	15	15	25	48	36	28	27	4	2	25	24	30	40	43	25	27	25	30	35
	Minimum...	34	34	34	33	36	37	31	20	13	26	11	6	-4	1	3	16	25	3	1	-6	-14	-3	3	17	14	23	9	14	7	11	19
St. Joseph	Maximum...	57	59	65	66	57	61	62	32	45	40	28	22	15	13	26	49	32	30	30	6	7	37	30	30	41	47	27	31	29	35	36
	Minimum...	35	36	38	40	40	38	30	22	19	27	9	5	0	2	7	25	19	9	3	-3	-9	3	8	20	20	20	13	15	11	13	21
Trenton	Maximum...	51	58	59	59	56	55	59	41	40	39	36	24	17	12	19	45	42	30	26	6	5	25	27	30	37	48	40	27	26	31	33
	Minimum...	34	33	36	36	39	33	41	25	17	24	21	8	-1	0	3	14	22	7	5	-3	-12	4	9	24	15	35	14	12	7	12	16

. . etc. indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charge the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
0
0
0.5
1
2
4
6
8

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, Chief

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CLIMATOLOGICAL DATA

MISSOURI SECTION

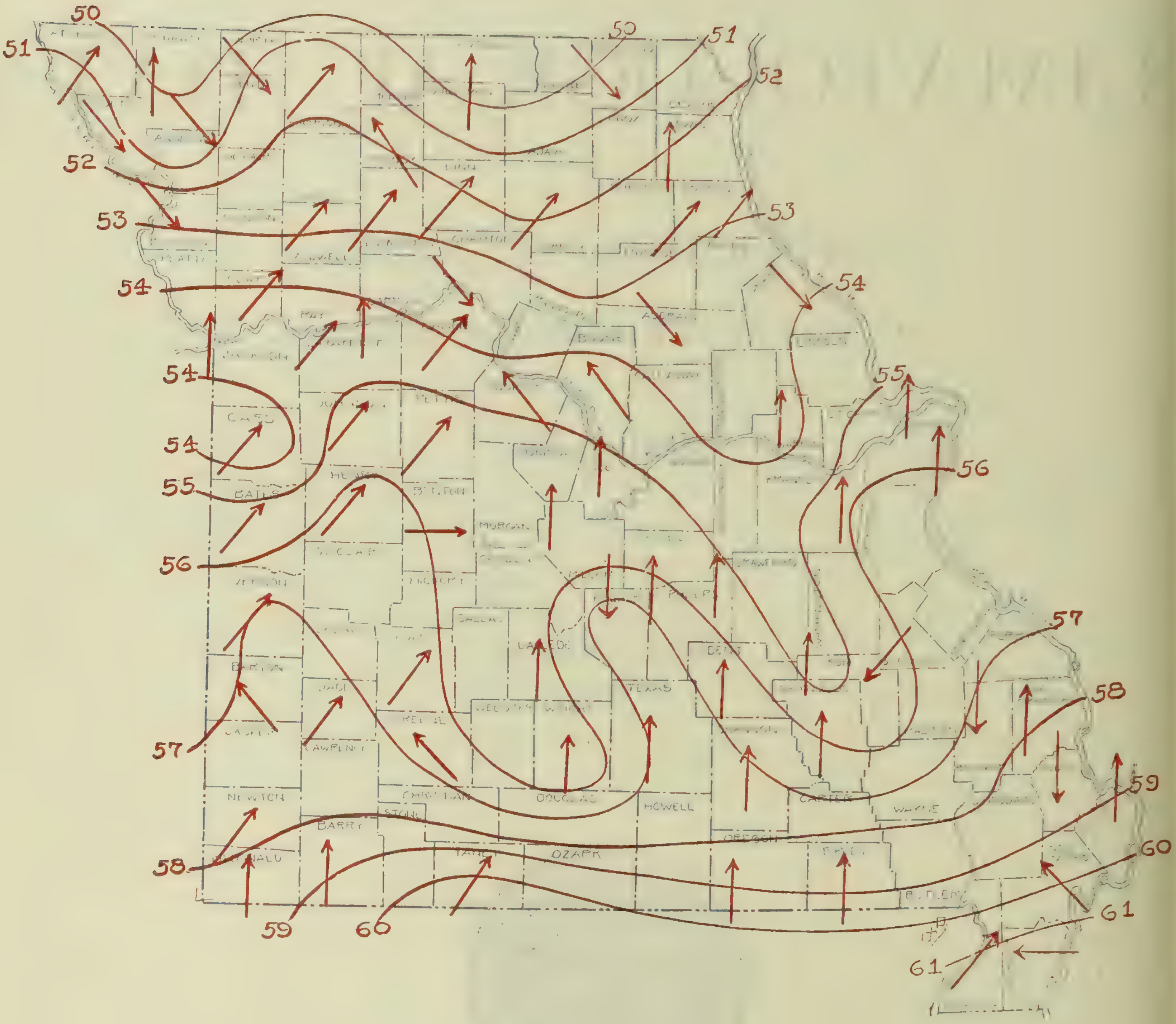
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

ANNUAL, 1916

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 5, 1917.

MEAN TEMPERATURE AND PREVAILING WINDS FOR THE YEAR 1916.



J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

. XX. COLUMBIA, MO., YEAR, 1916. No. 13.

GENERAL SUMMARY.

he outstanding feature of the weather of 1916 in Missou-
was the severe drought that prevailed during July and the
half of August—the most critical part of the corn grow-
season—and that continued in a modified form the re-
nder of the year.

he year began with marked temperature extremes, much
diness, and frequent and excessive precipitation. Ice
red the ground during most of January and the first
k or ten days of February. The latter part of February
most of March were favorable for outdoor work, as well
he month of May. Cool weather with frequent rains
ing April and the first three weeks of June greatly inter-
ted farm work; but all grasses made vigorous growth.
was the driest, and second warmest, of its name since
beginning of climatological records in the State; August
almost as bad, save in the northeastern plain. September
noticeable chiefly because of a general and damaging frost
he 29th, which abruptly closed the growing season. Most
he autumn, and up to and including the first week of De-
ber, was favorable for outdoor occupations.

p to the last week in June the spring and summer had been
ier cool and wet, and most vegetation was in a succulent
e; consequently the swift transition to excessive heat and
ight soon had a disastrous effect upon all crops that were
well on their way to maturity, such as wheat and hay.
effects upon human and animal life were also marked,
ticularly in the larger cities.

he mean annual temperature was 55.2°, or less than one
ree above normal. The temperature extremes, 29° below
and 109° above zero, while quite striking, were within the
its of previous years; during the past twenty-eight years the
ner record has been equaled or exceeded six times, and the
er nine times. There was more sunshine than usual, the
nber of clear days, 191, being almost double the number of
idy days.

he average precipitation for the State was 40.33 inches, or
ut 0.19 inches above normal. This markedly shows how
lly necessary to the corn crop of Missouri is the rainfall of
y and the first ten days or two weeks of August. The dis-
ution is graphically shown on page 107; and it will be in-
sting to compare this chart with a similar chart in the An-
l Summary of 1915, an exceptionally wet year.

Vheat was seriously damaged by the ice covered ground in
uary and February. Corn made rather a poor start because
the generally unfavorable spring weather, and it was so
itly damaged by the drought of July and August that the
d, according to the State Board of Agriculture, was more
n 55,000,000 bushels below that of an average year. Hay
le a bountiful yield; but other crops were nearly failures or
much below the normal yields. Peaches, as a rule, were
ter killed. Stock did quite well. During the closing
ths of the year newly sown wheat was in fair condition.
isture, however, was needed generally.

ther features more or less noteworthy, were the severe floods
January in the Osage watershed, and in the southeastern
t of the State; severe local storms of the tornado type on
il 19th, in several of the southwestern counties; local
age in St. Louis by wind, rain, and hail during the night
August 12th-13th; and overflowed lowlands in Marion and
e counties during the middle of August, the result of the
essive local rains on the 13th, 14th, and 15th.

THE WEATHER BY MONTHS.

January—The month was characterized by marked temperature extremes, much cloudiness, and frequent and excessive precipitation; the total precipitation was more than three times as great as the normal amount. Ice covered the ground, as well as other objects, most of the month, which seriously damaged the wire service of the State and interfered with traffic in general. Wheat was seriously injured. Peach buds were killed by the cold wave of the 12th and 13th. Ice in large quantities, of good quality, was housed. Severe floods occurred in the Osage watershed, and in the southeastern part of the State.

February—The first half of the month was cold and cloudy. Ice covered the ground during the first week in nearly all sections, and in the northern counties for a longer time. The latter half of the month was mild and bright. The total precipitation was less than normal; the snowfall was heavier in the plains than on the plateaus, but was generally below normal.

March—The first four days were cold, but the remainder of the month was favorable for outdoor work. The total precipitation was less than normal; snow was general on the 1st. Plowing, and seeding of oats made good progress. Wheat was not promising as it had been seriously winter killed. There was some flood damage in the lower part of the Grand River, and in the Osage near Warsaw.

April—This month was cloudy and cool. Precipitation fell frequently but amounts were below normal generally. Farm work was much interrupted. No unusually low temperatures occurred, but fires were constantly required for personal comfort. Severe local storms occurred in several of the central-southwestern counties during the afternoon and evening of the 19th. All grasses made fine growth.

May—A month of moderate warmth and sunshine, and abundant rainfall, except in the southeastern part of the State. There were no freezing temperatures. The weather was favorable for wheat, oats, meadows, and pastures. The strawberry crop was promising.

June—Generally cool, cloudy and wet weather prevailed until the last week, which was dry and hot. The weather was favorable for all grasses. Excessive rains in Joplin, Jasper County, on the 18th and 19th caused heavy damage to the telegraph and telephone services, railroads, and the zinc mines.

July—The month was one of almost continuous hot, dry weather, with a high percentage of sunshine. It was the dryest July in 49 years, and the second warmest in 28 years. The sudden transition from cool and wet weather to dry and hot weather resulted disastrously to most vegetation and to those farm crops that were not already well on their way to maturity. The effects upon human and animal life also were marked, particularly in the larger cities. The month was favorable for for harvesting of grain and hay, the latter being of heavy yield and fine quality.

August—Good rains about the middle of the month broke the drought in most of the northern half of the State, but there was not much relief south of the Missouri River. Rains were excessive over the northeast part of the State on the 13th, 14th, and 15th; and many of the smaller streams overflowed their banks. In Marion and Pike counties considerable damage was done. During the night of the 12th a severe thunderstorm, attended by wind, hail and rain caused heavy local damage in St. Louis. The rains were rather too late to benefit growing crops to any appreciable extent, but they facilitated fall plowing.

September—Most of the month was pleasant and generally favorable, except that the first week was abnormally warm. A general and severe frost on the 29th badly damaged legumes not harvested, fall gardens, and some late corn, and prematurely ended the growing season.

October—Fine weather prevailed during this month. Grasses and fall sown grain suffered somewhat from lack of moisture. The continued dry weather in the southeastern part of the State caused many wells there to fail, and the family drinking water had to be hauled from distant places.

November—A severe freeze prevailed over the entire State from about the 12th to the 15th, otherwise the month was pleasant and favorable for outdoor occupations Dense fogs formed on several days. An unusually dense fog prevailed in Kansas City for several hours on the morning of the 28th, interrupting traffic in general and train service in particular.

December—The first week was mild, but the remainder of the month was cold and generally unfavorable for outdoor work. Temperatures from near zero to 20° or more below zero obtained on the 14th, 15th, 21st, and 22d. Precipitation in the Ozark plateau and southeastern lowlands was greater than the average, but the remainder of the State was drier than usual; the snowfall was heavy in the Ozarks. Wheat was in fair condition at the close of the month.

Comparative Annual Data for the State

Year	Temperature			Precipitation	Year	Temperature			Precipitation
	Mean	Maximum	Minimum			Mean	Maximum	Minimum	
1888	52.9	111	−32	41.22	1903	53.6	102	−25	40.15
1889	54.3	107	− 9	37.91	1904	53.2	100	−23	41.62
1890	54.7	106	−19	35.71	1905	53.6	103	-40	45.43
1891	53.9	108	−11	38.04	1906	55.1	101	−13	37.34
1892	53.4	101	−11	42.76	1907	55.6	109	−15	41.81
1893	52.7	107	−20	38.19	1908	56.7	102	10	42.56
1894	55.1	111	−35	33.18	1909	56.7	110	−20	45.16
1895	52.9	106	−26	39.30	1910	55.0	109	−24	36.86
1896	55.5	108	−10	44.63	1911	56.9	113	−19	38.94
1897	55.0	108	−16	38.82	1912	53.6	105	−36	38.68
1898	54.4	104	−20	53.67	1913	56.5	110	−12	37.47
1899	54.0	108	−32	37.32	1914	56.1	109	18	34.72
1900	55.6	105	−16	38.34	1915	54.8	102	24	49.62
1901	55.5	116	-29	25.28	1916	55.2	109	−29	40.33
1902	54.1	103	-17	44.96	Average 29 yrs	54.7	116	-40	40.17

KILLING FROSTS

Stations.	Last in Spring	First in Autumn.	Days in growing season	Stations.	Last in Spring	First in Autumn.
Northeast Plain.				*Ozark Plateau (continued)*		
Brunswick	April 10	Oct. 20	192	Gano	April 9	Oct. 2
Clifton Hill		Oct. 20		Goodland	April 30	Sept. 3
Columbia	April 9	Oct. 21	191	Hollister	April 9	Oct. 2
Fayette	April 9	Oct. 19	192	Houston	April 9	Oct. 2
Fulton	April 9	Oct. ...		Ironton	April 9	Sept. 1
Hannibal	April 9	Oct. 20	193	Koshkonong	April 9	Oct. 2
Jefferson City	April 9	Oct. 20	193	Lebanon	April 10	Sept. 2
Keokuk, Iowa	April 9	Oct. 21	194	Lockwood	April 9	Sept. 2
Louisiana	April 9	Oct. 11	184	Mountain Grove	April 9	Oct. 2
Macon	April 10	Oct. 26	192	Neosho	April 9	Sept. 2
Mexico	April 9	Oct. 21	194	Rolla	April 9	Oct. 2
Oakfield	April 9	Oct. 20	193	Springfield	April 9	Oct. 2
Palmyra	April 10	Oct. 11	183			
St. Catherine	April 9	Sept. 29	172	*Southwest Plain.*		
St. Charles	April 9	Oct. 20	193	Amoret	April 9	Sept. 2
St. Louis (1)	April 9	Oct. 21	194	Appleton City		Oct. 2
St. Louis (2)	April 9	Oct. 20	193	Clinton	April 9	Oct. 2
Steffenville	April 22	Sept. 29	159	Harrisonville	April 9	Oct. 2
Unionville	April 10	Sept. 29	171	Lamar	April 9	Sept. 2
Warrenton	April 9	Oct. 20	193	Lamonte	April 9	Sept. 2
				Marshall	April 9	Oct. 2
Southeast Lowlands				Nevada	April 9	Sept. 2
Cardwell	April 10	Sept. 30	172	Warrensburg	April 9	Oct. 2
Caruthersville	April 9	Oct. 21	194	Warsaw	April 9	Sept. 2
Doniphan	April 9	Oct. 1	174			
Jackson	April 9	Oct. 11	183	*Northwest Plateau.*		
Marble Hill	April 2	Oct. 21	201	Avalon	April 9	Oct. 2
Poplar Bluff	April 9	Oct. 21	194	Bethany	April 9	Sept. 1
Sikeston	April 9	Oct. 21	194	Conception	April 9	Oct. 1
Cairo, Ill.	March 23	Nov. 14	234	Grant City	April 10	Sept. 2
				Kansas City	April 9	Oct. 1
Ozark Plateau.				Kidder	April 9	Sept. 2
Birchtree	April 9	Sept. 30	175	Lexington	April 9	Oct. 2
Bolivar	April 9	Oct. 20	193	Liberty	April 9	Sept. 2
Cassville	April 8	Oct. 21	195	Maryville	April 10	Sept. 2
Crocker	April 8	Sept. 29	173	Oregon	April 9	Sept. 2
Dean	April 8	Oct. 20	191	St. Joseph	April 9	Sept. 2
Eldon	April 9	Sept. 29	172	Tarkio	April 10	Sept. 2
Fruit City	April 9	Nov. 13	217	Trenton	April 10	Oct. 2

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR THE YEAR 1916 AT THE UNIVERSITY OF MISSOURI, COLUMBIA, MO.

(See Temperature and Precipitation Data in Climatological Tables, pages 102 and 103.)

Date.		Day of month.																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
April	Evaporation	....	.305	.212	.193	.116	.109	.128	†061	.066	.098	.132	.135	.207	.031	.107	.064	.116	.155	.122	.135	.060	.071	.15	.151	.107	.062	.038	.082	.163	.191	....
	Wind movement	56	37	62	66	44	70	71	57	89	53	46	61	93	55	58	61	50	45	57	85	89	74	49	40	57	76	54	30	28	49	....
May	Evaporation	.051	.091	.113	†064	.166	.225	.189	.244	.242	.182	.213	.081	.044	.120	.145	.206	.215	.173	.178	.071	.140	.110	.210	.206	.207	.266	.090	.184	.227	.236	.224
	Wind movement	42	43	52	24	45	29	46	40	34	59	54	35	56	30	43	48	62	46	21	24	37	44	29	36	28	29	35	21	30	31	27
June	Evaporation	.099	.237	.258	.143	.252	.088	.029	.233	.133	.268	.106	.042	.172	.076	.200	.196	.215	.219	.152	.041	.179	.146	.212	.100	.234	.192	.212	.253	.219	.258	....
	Wind movement	40	43	48	18	31	64	80	74	70	36	13	19	17	14	27	40	47	31	24	16	52	43	38	17	26	25	31	30	26	23	....
July	Evaporation	.246	.232	.235	.204	.200	.274	.293	.274	.262	.275	.254	.265	.106	.283	.257	.254	.224	.161	.233	.197	.275	.238	.275	.269	.278	.275	.291	.301	.212	.249	.188
	Wind movement	17	24	16	23	22	25	29	27	26	32	22	18	18	19	26	17	17	19	19	21	31	22	16	16	13	16	14	16	11	16	14
August	Evaporation	.247	.252	.141	.245	.305	.360	.219	.273	.261	.267	.325	.149	.280	.177	.048	.132	.138	.254	.230	.205	.242	.205	.178	.199	.123	.365	.148	.082	.168	.159	.163
	Wind movement	28	23	16	18	24	26	32	31	24	29	38	40	44	48	27	22	14	21	15	12	19	20	28	23	27	37	34	23	21	16	18
September	Evaporation	.151	.067	.119	.120	.175	.210	.184	.030	.153	.145	.135	.109	.115	.108	.136	.138	.147	.145	.134	.121	.081	.158	.140	.098	.038	.125	.326	.065	.084	.075	....
	Wind movement	20	11	12	10	24	26	27	10	23	24	20	18	26	14	40	37	37	39	26	26	33	30	39	20	21	27	65	28	54	21	....
October	Evaporation	.137	.123	.163	.135	.135	.114	.083	.121	.108	.075	.088	.076	.025	.120	.071	†011	.049	.100	.022	†025	†004	.083	.096	.037	.007	.081	.074	.090	.130	.072	.049
	Wind movement	33	36	41	36	26	23	19	18	32	45	30	25	50	36	25	21	32	52	28	81	76	35	40	35	57	50	45	25	40	40	29
November	Evaporation	.103	.082	.098	.086	.080	.122	.110	.127	.124	.070	.071	.041	.001	*	*	*	*	*	.144	.030	.067	.003	019	.075	*	*	.140	.053	.033	.062	....
	Wind movement	34	27	32	41	27	43	78	84	66	65	72	62	70	102	60	13	45	40	50	34	54	56	62	121	61	70	87	59	27	46	....
December	Evaporation	.039	.040	.058	.001	.092	.064	.064	.071	*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	48	30	47	33	59	29	67	85	*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

* Frozen over; total evaporation in next following measurement.

† indicates minus, (−).

Observations taken at 6.50 a. m.

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, northwest; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical. made of 22 BWG iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consist of a hook gage, still well, anemometer, maximum, and minimum thermometer, townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standard described in Circular L. Horizontal distance of the anemometer f pan, 2 inches. Height of cups of anemometer above rim of pa inches. The instrument shelter is 100 feet southeast of the pan; he of thermometers above ground, 11 feet. Distance of rain gage from 2.6 feet. The ground in the immediate vicinity of the pan slopes to north, average 5 per cent grade. The soil is covered by blue grass being part of the University campus. There are no bodies of water n nor are there any irrigation projects under way nearby. The gen topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising offi being George Reeder, Meteorologist and Section Director. The obse tions in the table herewith, were taken by Philip G. McGinnis, assist observer, Weather Bureau. This is one of the "Class A" stations signed to furnish practical information relative to evaporation. Full complete climatic records have been made at Columbia, Mo., by Weather Bureau for about 26 years. These records are published by are obtainable at the Weather Bureau.

Climatological data for Year, 1916.

Stations	Counties	Elevation, feet	Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				Prevailing direction of wind.
			Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
theast Plain.																				
onville	Cooper	621	......	......	......	......	......	......	40	37.70	6.91	May	0.58	Feb.	......	99	226	27	113	se.
unswick	Chariton	652	28	53 5	100.	Aug. 12	−15	Jan. 13	37	41 95	7.70	June	0.31	Dec.	13.7	89	184	23	159	nw.
umbia	Boone	784	27	54.5	100	July 31†	−11	Jan. 13	27	33 63	6.80	Jan.	0.67	July	20.1	109	143	92	131	se.
ette	Howard	725	31	53.9	104	July 28	−15	Jan. 13	34	36 66	6.60	Jan.	0.55	July	16.0	71	......	......	......	......
nnibal	Marion	534	25	53.1	101	July 25	−13	Jan. 13	25	38.98	9.15	Aug.	0.05	July	24.6	114	167	88	111	sw.
rmann	Gasconade	519	......	......	......	......	......	......	43	31.63	6.28	May	0.39	July	22.0	115	158	68	140	e.
erson City	Cole	557	29	55.1	103	Jan. 25	−10	Jan. 13	34	38 61	8.33	May	1.10	Feb.	18.0	106	242^{b}	36^{b}	86^{b}	s.
tesville	Chariton	660	......	......	......	......	......	......	4	36 03	5.65	Jan.	0.57	July	15.1	76	......	......	......	......
uisiana	Pike	469	23	54.2	104	July 26†	−10	Jan. 13	39	50.61	14.86	Aug.	0.28	July	30.0	105	185	106	75	nw.
con	Macon	875	18	51.9	103	July 28	−15	Jan. 13†	19	44.47	9.52	May	0.12	July	21.5	90	178	80	108	sw.
xico	Audrain	797	28	53 3	103	July 31	−12	Jan. 13†	39	42.11	7.73	Aug.	1.05	Feb.	25.1	104	207	5	154	nw.
field	Franklin	500	25	56 3	102	July 31†	− 7	Jan. 13	25	39.58	8.37	Jan.	0.83	July	28.3	84	106	163	97	s.
myra	Marion	652	15	52.0	103	July 25	−14	Jan. 13	18	47.22	10.58	May	0.79	July	16 8	91	......	......	......	sw.
atherine	Linn	850	4	52.1	100	July 31	−17	Jan. 13	3	40.93	6.27	Aug.	0.52	Feb.	19.5	95	164	131	71	sw.
Charles	St. Charles	456	29	55.8	103	July 25	− 6	Jan. 13	39	40 43	11.74	Aug	0 50	July	18.7	69	163	102	101	s.
Louis (1)	St. Louis City	717	44	56.6	99	July 31	− 4	Jan. 13	46	41.80	10.69	Aug.	1.20	July	21.0	108	169	94	103	s.
Louis (2)	......do	578	5	56.0	100	July 31	− 5	Jan. 13	5	46.83	13.65	Aug.	0.61	July	31.7	120	170	98	98	se.
fenville	Lewis	650	19	53.8	109	July 28†	−14	Jan. 13	24	43.79	8.46	May	0.49	July	20.5	86	152	133	81	s.
ionville	Putnam	1,072	24	49.9	104	July 31	−20	Jan. 13†	24	43.47	9.23	May	0.82	Feb.	18.5	87	196^{a}	46^{a}	123^{a}	s.
rrenton	Warren	865	33	53.6	103	July 25†	−10	Jan. 13	27	32.33	7.48	Jan.	0.80	Dec.	20.5	104	122	121	123	s.
tion means and extremes				53.9	109	July 28†	−20	Jan. 13†	......	40.44	14.86	Aug.	0.05	July	21.1	96	173	83	110	s.
utheast Lowlands.																				
dwell	Dunklin	270	5	......	103	Aug. 18	......	......	......	......	......	......	......	......	......	......	......	......	......	......
uthersville	Pemiscott	220	21	61.5	101	July 16	3	Dec. 15	26	46.27	9.45	June	1.47	Nov.	10.0	77	261	35	70	e.
niphan	Ripley	344	13	58.8	100	Aug. 14†	− 3	Dec. 15†	13	41.68	8.65	Jan.	1.11	Aug.	11.0	89	217	62	87	s.
kson	Cape Girardeau	458	26	58.2	103	Aug. 18	−23	Dec. 15	26	45.46	12.96	June	1.31	July	19.0	86	134	115	117	s.
ble Hill	Bollinger	420	23	57.3	102	July 24†	−10	Dec. 15	26	47.27	9.37	Jan.	1.50	March	13.0	135	......	......	......	......
w Madrid	New Madrid	285	......	......	......	......	......	......	23	43.85	10 51	Jan.	1.09	Aug.	7.5	116	190^{a}	35^{a}	140^{a}	se.
ton (near)	Bollinger	500	......	......	......	......	......	......	3	35.91	9.74	Jan.	0.98	March	......	56	221	1	144	n.
plar Bluff	Butler	339	13	58.2	100	Aug. 12	−17	Dec. 15	14	43.94	9.31	Jan.	1 27	Feb.	10.1	90	222	41	103	......
eston	Scott	328	16	......	100	July 17†	4	Dec. 15	17	48.23	9.29	Jan.	1.05	Feb.	6.7	90	229	80	57	n.
iro, Ill.	Alexander, Ill	359	45	58.7	96	July 25†	3	Dec. 15	45	35 32	8.11	Jan.	0.21	July	6.3	99	142	120	104	s.
tion means and extremes				58.8	103	Aug. 18	−23	Dec. 15	......	43.10	12.96	June	0.21	July	10.4	93	202	61	103	s.
ark Plateau.																				
lington	Phelps	767	......	......	......	......	......	......	14	32.37	6.90	Jan.	0.30	July	......	104	215	24	127	s.
entree	Shannon	1,078	23	56.5	100	July 31	− 8	Dec. 15	24	36.33	8.37	Jan.	0.48	Oct.	12.3	77	260	33	73	s.
livar	Polk	1,071	21	56.5	106	Aug. 12	− 8	Jan. 13†	30	40 08	7.81	Jan.	1.00	Aug.	21.3	72	225	71	70	sw.
ecker	Pulaski	1,126	5	57.6	103	July 15†	−10	Jan. 16	6	....	7.35	Jan.	0.31	Dec.	26.0	......	257^{f}	32^{f}	71^{f}	n.
an	McDonald	1,000	18	58.2	102	July 17†	−20	Dec. 22	18	48.11	13.36	Jan.	0.83	Feb.	11.1	91	243^{i}	30^{i}	84^{i}	s.
lon	Miller	934	17	55.0	102	July 17†	−12	Jan. 13	5	28.17	5.60	May	0.92	Feb.	15.5	84	139	150	77	s.
em	Dent	1,250	13	56.2	104	July 25	−10	Dec. 22	14	42.69	8.77	Jan.	0.34	July	27.9	99	214	64	88	s.
odland	Iron	1,000	12	54.8	100	July 31	−18	Dec. 22	12	49 67	12.38	Jan.	1.48	March	21.5	74	205	74	87	s.
llister	Taney	735	31	60.1	106	July 15†	− 6	Dec. 22	8	46.90	13.20	Jan.	0.40	Feb. *	13.5	63	261	0	105	sw.
uston	Texas	1,280	24	56.9	99	July 14†	−13	Dec. 22	25	40 52	10.13	Jan.	0.78	Feb.	24.6	80	237^{a}	39^{a}	89	s.
nton	Iron	925	36	55.3	102	July 31	−15	Dec. 15	39	43.59	12.18	Jan.	1.20	Oct.	24 5	102	113	139	114	ne.
shkonong	Oregon	958	16	59.1	103	July 31	− 2	Dec. 15†	16	43.84	9.02	Jan.	0.57	July	15.5	74	176	97	103	s.
banon	Laclede	1,265	28	56.2	104	Aug. 7	−11	Dec. 22	28	39.83	9.33	Jan.	0.66	Feb.	27.5	95	216	47	103	s.
ckwood	Dade	1,078	11	56.9	102	July 31	− 9	Jan. 13	23	42.20	8.67	Jan.	T.	July	18.2	69	212^{a}	56^{a}	97^{a}	sw.
untain Grove	Wright	1,490	16	55.6	101	July 31†	− 8	Dec. 22	18	36 86	10.92	Jan.	0 56	Feb.	21.0	84	156^{i}	82^{i}	119^{i}	s.
osho	Newton	1,011	31	57.4	100	Aug. 13†	−18	Dec. 22	34	47.76	11.80	Jan.	0.84	Feb.	13.9	98	247	40	79	sw.
lla	Phelps	1,139	17	55.4	103	July 30	− 7	Jan. 13†	36	42.32	9.72	Jan.	0.74	July	32.5	89	197	100	69	s.
ringfield	Greene	1,350	29	56.1	96	July 31	− 8	Jan. 13	29	37.80	9.31	Jan.	0.57	Feb.	30.7	106	202	88	76	se.
tion means and extremes				56.7	106	July 15†	−20	Dec. 22	......	41.12	13.20	Jan.	T.	July	21.0	86	210	65	91	s.
uthwest Plain.																				
oret	Bates	831	8	55.7	104	July 31†	−14	Jan. 13	8	37.35	7 23	June	0.50	Feb	26.0	79	175	77	114	sw.
nton	Henry	765	9	56.8	103	July 15†	− 9	Dec. 22	31	36.81	8.01	Jan.	0.30	Aug.	18.5	59	168^{b}	127^{b}	69^{b}	sw.
rrisonville	Cass	912	39	53.8	104	Aug. 12	−14	Jan. 13†	45	42.20	7.13	June	0.26	Feb.	24.7	93	141	51	174	sw.
mar	Barton	980	30	56.9	105	Aug. 12	− 9	Jan. 13†	36	46.24	12.76	June	T.	July	8.0	80	238	33	95	se.
rshall	Saline	779	26	53.9	102	July 25	−14	Jan. 13	26	41 48	7.22	Jan.	0.35	Dec.	14.2	82	178^{b}	104^{b}	76^{b}	sw.
vada	Vernon	860	22	57.0	104	Aug 12	− 9	Jan. 13	23	33.74	6.95	June	0.46	July	25.0	73	230	61	75	sw.
rrensburg	Johnson	883	34	55.8	106	July 25†	−14	Jan. 13	38	43.33	7.00	Jan.	0.47	Dec.	21.3	93	172	100	94	sw.
rsaw	Benton	687	13	56.0	105	Aug. 7	−10	Jan. 13	13	49.77	8.55	Jan.	1.85	Feb	37.0	102	170	147	49	w.
verly	Lafayette	642	......	......	......	......	......	......	2	42.08	7.96	May	T.	July	12.3	93	185^{b}	65^{b}	114^{b}	sw.
tion means and extremes				55.7	106	July 25†	−14	Jan. 13†	......	41.44	12.76	June	T.	July	20.8	84	184	86	96	sw.
rthwest Plateau.																				
thany	Harrison	916	25	51.1	102	July 25†	−20	Jan. 13	27	34.53	7.01	May	0.22	Dec.	16.5	74	135	131	100	sw.
illicothe	Livingston	779	......	......	......	......	......	......	......	36.71	8.08	June	0.19	Dec.	11.2	75	192	20	154	......
nception	Nodaway	982	28	......	......	......	−24	Jan. 13	32	32.77	7.15	May	0.50	Feb.	14.0	77	132	163	71	nw.
unt City	Worth	1,134	14	51.4	103	July 28†	−21	Jan 13	25	34.78	7.04	May	0.70	Dec	19.5	63	224^{b}	44^{b}	96^{b}	nw.
nsas City	Jackson	963	28	54.7	100	July 16	−14	Jan. 13	28	42.08	5.52	Jan.	0.34	Dec.	24.8	110	185	99	82	s.
lder	Caldwell	1,020	24	52.3	104	July 28	−20	Jan. 13	26	34.16	7.90	May	0.43	Dec.	18.3	94	206	60	100	sw.
xington	Lafayette	688	31	54.2	101	July 16	−15	Jan. 13	35	37.32	6.29	May	0.06	July	19 6	79	205	3	158	s.
erty	Clay	864	27	54.9	103	Aug. 12	−16	Jan. 13	28	44.17	7.02	June	0.24	Dec.	16.7	75	221^{i}	81^{i}	55^{i}	sw.
ryville	Nodaway	1,036	23	49.4	101	Aug. 4	−22	Jan. 13†	26	35 88	9.88	May	0.30	Feb.	18.7	94	203	45	118	s.
gon	Holt	1,048	61	51.0	97	July 16	−21	Jan. 13	61	34.58	7.23	May	0.35	Feb.	17.1	71	166	116	84	nw.
Joseph	Buchanan	967	9	53.0	102	Aug. 4	−19	Jan. 13	46	34.40	7.79	May	0.47	Feb.	13.6	94	155	120	91	nw.
kio	Atchison	976	14	51.6	99	July 31	−22	Jan. 13	24	35.90	9 76	May	0.17	March	10.7	81	207	63	76	sw.
nton	Grundy	822	21	52.4	98	July 30†	−18	Jan. 13	22	36.51	7.98	May	0.41	Dec.	14.0	82	169	81	115	se.
tion means and extremes				52 4	104	July 28	−24	Jan. 13	......	36.45	9.88	May	0.17	March	16.5	82	185	80	101	sw.
te means and extremes				55.2	109‡	July 28†	−29§	Dec. 15	......	40.33	14.86‖	Aug.	T. ¶	July	19 0	89	191	75	100	s.

† Also on other dates. ‡ At Steffenville July 28th and July 31st. § At Cassville. ‖ At Louisiana. ¶ At Lockwood, Lamar and Waverly. * Also July. ^{a}, ^{b}, ^{c}, indi-
e the number of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Precipitation for the Year 1916, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain.																										
Boonville	5.34	+3.34	0.58	−2.14	2.80	−0.31	1.85	−2.15	6.91	+1.44	4.57	−1.38	1.04	−3.32	3.65	−0.25	5.23	+1.83	2.66	−0.11	2.39	−0.04	0.68	−1.38	37.70	−5.00
Brunswick	5.97	+4.26	0.75	−1.21	4.48	+2.05	2.93	−0.27	7.53	+2.56	7.70	+2.01	1.59	−3.01	2.03	−1.99	2.83	−1.16	1.22	−1.36	1.61	−0.31	0.31	−1.12	40.95	−2.87
Clifton Hill	...	...	...	...	...	...	...	...	...	...	4.91	...	0.57	...	2.20	...	2.59	...	3.61	...	2.43	...	0.55	...	...	...
Columbia	6.80	+4.57	0.81	−1.41	1.93	−1.10	2.68	−1.02	5.21	+0.35	3.64	−0.74	0.67	−2.98	2.04	−1.00	4.43	+1.58	1.55	−0.87	2.21	−0.10	1.66	−0.35	33.63	−3.07
Fayette	6.60	+4.57	0.77	−1.33	2.46	−0.22	2.36	−1.09	5.98	+1.29	5.55	+0.87	0.55	−3.35	3.70	+0.77	3.16	−1.49	2.19	−0.66	2.36	+0.32	0.68	−1.05	36.36	−0.69
Fulton	5.98	+3.39	0.77	−1.37	1.26	−1.64	2.59	−1.59	7.18	+2.47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glencoe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.88	...	0.93	...	...	...
Gorin	5.19	+3.50	0.34	−1.32	4.38	+1.82	3.03	−1.04	9.54	+5.08	5.52	+1.89	0.37	−4.22	...	...	1.62	−2.60	2.95	+0.67	1.78	−0.19	0.47	−1.42	...	...
Hannibal	6.40	+4.20	0.53	−1.14	1.44	−1.32	1.64	−1.61	6.25	+1.25	5.56	+2.04	0.65	−3.70	9.15	+5.77	2.77	−0.79	1.59	−0.05	[illegible]	+0.96	1.59	−0.06	[illegible]	+4.65
Hermann	5.83	+3.58	0.92	−1.54	1.47	−1.65	1.37	−2.43	6.28	+1.97	3.39	−1.16	0.39	−3.63	5.33	+2.31	1.60	−2.47	2.34	−0.34	2.07	−0.75	0.64	−1.20	31.63	−3.65
Jefferson City	6.89	+4.61	1.10	−1.14	1.69	−1.42	3.31	−0.28	8.33	+3.94	2.63	−1.65	3.09	−0.64	4.66	+1.99	1.14	−1.95	1.21	−1.08	2.03	−0.24	2.53	−0.58	38.61	−2.72
Keytesville	5.65	...	0.87	...	4.38	...	4.59	...	5.16	...	4.72	...	0.57	...	1.56	...	2.57	...	3.49	...	1.83	...	0.63	...	36.02	...
Louisiana	7.44	+5.38	1.26	−1.23	1.67	−0.92	1.28	−1.73	10.01	+5.54	5.31	+1.12	0.28	−3.25	14.86	*11.95	3.12	−0.21	1.82	−0.45	1.91	−0.35	1.65	−0.23	50.61	*18.89
Macon	6.67	+5.32	0.62	−1.53	3.15	+0.48	2.76	−0.03	9.52	+5.64	7.08	+2.16	0.12	−3.15	6.75	+3.97	2.15	−2.02	3.26	−0.48	1.57	−0.46	0.42	−1.13	44.47	*10.56
Mexico	6.11	+4.00	1.05	−1.45	1.75	−0.90	1.85	−1.64	6.48	+1.69	3.37	−1.97	3.75	−0.30	7.73	+5.00	3.71	−0.25	1.95	−0.27	2.57	+0.17	1.79	−0.33	42.11	+3.75
Oakfield	8.37	+5.98	1.16	−1.42	1.41	−2.29	2.14	−2.06	4.46	−0.94	6.88	+2.25	0.83	−3.99	6.06	+2.82	2.71	−1.28	1.73	−1.13	2.84	+0.22	0.99	−1.03	39.58	+2.86
Pacific	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.90	...	1.04	...	...	...
Palmyra	8.29	+5.98	0.85	−1.39	1.28	−1.64	2.96	−0.64	10.58	+5.93	5.79	+1.47	0.79	−2.89	8.91	+5.71	2.80	−0.82	2.11	+0.13	1.69	−0.65	1.17	−0.81	47.22	*10.38
St. Catherine	5.60	...	0.52	...	4.02	...	4.41	...	4.55	...	4.58	...	4.02	...	6.27	...	1.26	...	3.71	...	1.45	...	0.54	...	40.93	...
St. Charles	8.08	+5.75	1.93	−1.05	1.39	−0.86	2.55	−0.85	4.02	−0.31	4.23	+0.03	0.50	−3.04	11.74	+8.79	1.24	−1.47	1.47	−0.95	2.48	−0.18	0.80	−1.15	40.43	+4.71
St. Louis (1)	8.53	+6.26	1.78	−1.08	1.83	−1.60	1.78	−1.74	3.06	−1.24	3.97	−0.50	1.20	−2.23	10.69	+8.03	2.69	−0.22	1.61	−0.77	2.53	−0.35	2.16	−0.07	41.83	+4.49
St. Louis (2)	9.05	...	2.18	...	2.14	...	2.26	...	3.02	...	3.74	...	0.61	...	13.65	...	3.08	...	1.60	...	3.24	...	2.26	...	46.83	...
Steffenville	8.11	+5.79	0.92	−1.12	1.62	−1.27	2.51	−1.12	8.46	+3.18	5.36	+1.47	0.49	−4.60	7.88	+4.41	1.31	−3.14	2.95	−0.85	2.95	+1.07	1.25	−0.48	43.79	−5.04
Union	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.62	...	0.99	...	...	...
Unionville	4.13	+2.07	0.82	−1.17	3.66	+1.38	2.18	−1.48	9.23	+3.38	4.61	+0.43	1.69	−2.69	8.50	+4.48	2.04	−2.60	3.25	+1.05	2.31	+0.64	1.65	−0.66	43.47	−4.83
Valley Park	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.44	...	1.60	...	...	...
Vandalia	3.85	...	3.00	...	0.40	...	1.20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrenton	7.48	+4.87	1.14	−1.40	1.63	−1.77	2.18	−1.71	6.04	+1.13	2.52	−2.01	1.13	−2.88	2.95	+0.21	2.82	−1.03	1.50	−1.23	2.14	−0.50	0.80	−1.37	32.33	−7.69
Sec. mns. and extr.	6.63	+4.60	1.07	−1.34	2.27	−0.70	2.45	−1.29	6.72	+2.33	4.85	+0.35	1.13	−2.99	6.68	+3.73	2.56	−1.17	2.46	−0.08	2.22	−0.04	1.12	−0.75	40.16	−2.93
Southeast Lowlands.																										
Cape Girardeau	10.75	+6.10	0.85	−1.54	1.65	−1.70	3.12	−0.63	2.49	−1.21	7.83	+4.14	0.43	...	...	...	...	...	...	...	...	...	7.08	...	...	...
Cardwell	9.25	...	1.57	...	3.02	...	3.90	...	4.63	...	4.39	...	2.54	...	2.23	...	2.42	...	2.10	...	2.45	...	...	...	...	...
Caruthersville	8.95	+4.97	1.68	−2.51	2.80	−1.14	2.91	−0.96	5.89	+1.77	9.45	+5.49	1.78	−1.92	2.74	−0.26	1.51	−1.67	2.67	+0.06	1.47	−2.55	4.42	+0.12	46.27	−1.38
Doniphan	8.65	+4.68	1.13	−2.67	1.96	−1.96	4.01	−1.37	2.56	−1.21	8.12	+3.90	1.30	−4.70	1.11	−2.64	2.67	−1.10	1.18	−1.81	3.93	+1.03	5.05	+2.24	41.67	−5.61
Jackson	8.03	+4.40	1.64	−1.68	1.49	−3.33	2.64	−1.90	2.65	−1.63	12.96	+8.72	1.31	−2.46	2.45	−0.61	4.06	+0.47	3.74	+0.79	2.19	−1.30	2.30	−0.98	45.46	−2.45
Marble Hill	9.37	+6.13	2.22	−1.45	1.50	−3.27	2.73	−1.91	2.64	−1.74	8.08	+3.76	1.67	−3.23	4.06	+1.11	2.90	−0.79	2.55	+0.16	2.55	−0.66	7.00	+3.84	47.27	+1.95
New Madrid	10.51	+5.27	1.77	−2.44	3.17	−2.55	2.76	−1.61	5.39	+1.07	6.70	+2.60	1.66	−2.69	1.09	−2.38	1.72	−1.61	2.92	−0.42	2.13	−2.06	4.03	−0.19	43.85	−7.01
Patton (near)	9.74	...	1.20	...	0.98	...	3.06	...	2.16	...	7.48	...	1.50	...	1.25	...	1.40	...	1.54	...	1.45	...	4.15	...	35.91	...
Poplar Bluff	9.31	+5.75	1.27	−2.39	2.38	−2.99	3.38	−1.05	2.53	−2.46	6.85	+1.53	1.72	−2.03	3.00	−0.17	3.61	+0.44	2.04	−0.79	2.89	−0.59	4.96	+1.24	43.94	−3.20
Sikeston	9.29	+4.82	1.05	−2.58	2.01	−3.41	2.56	−1.67	3.39	−1.37	7.37	+2.99	5.99	+1.66	4.28	+0.91	2.73	−0.25	1.71	−0.75	2.11	−1.75	5.74	+1.90	48.23	−0.52
Cairo, Ill.	8.11	+4.29	0.83	−2.61	1.65	−2.37	1.66	−1.91	3.06	−0.77	8.00	+3.69	0.21	−3.24	2.28	−0.65	2.67	−0.40	1.29	−1.34	1.70	−2.32	4.46	+1.13	35.92	−6.50
Sec. mns. and extr.	9.27	+5.15	1.38	−2.21	2.06	−2.52	2.98	−1.45	3.40	−0.84	8.29	+4.11	1.83	−2.33	2.47	−0.59	2.52	−0.61	2.18	−0.51	2.29	−1.21	4.92	+1.16	43.1[illegible]	−2.62
Ozark Plateau.																										
Arlington	6.90	+4.88	1.46	−1.45	1.54	−1.40	4.09	+0.37	5.05	+0.73	2.88	−0.66	0.30	−3.06	2.65	−1.16	3.65	−0.05	1.20	−1.02	1.65	−1.08	1.60	−0.56	32.37	−4.46
Bagnell	...	...	0.97	...	1.95	−1.29	2.95	−0.85	5.48	+0.91	3.80	−1.10	1.05	−3.45	...	...	...	...	...	...	...	...	...	...	...	...
Birchtree	8.37	+5.65	0.98	−1.91	2.32	−2.58	3.67	−1.02	2.55	−1.59	5.56	+0.94	0.68	−4.11	2.33	−1.64	2.26	−1.21	0.48	−2.07	3.04	+0.21	4.09	−1.59	36.33	−7.74
Bolivar	7.81	+5.81	1.11	−0.23	2.36	−0.65	2.57	−1.27	6.05	+0.64	4.69	−0.87	3.61	−0.29	1.00	−2.66	3.15	−0.32	1.47	−1.26	3.21	−0.47	3.05	−0.58	40.08	−0.05
Cassville	...	...	...	...	...	...	5.70	...	2.35	...	7.62	...	0.77	...	1.09	...	3.16	...	1.63	...	2.65	...	2.73	...	...	...
Crocker	7.35	...	0.51	...	...	...	2.38	...	6.18	...	2.88	...	1.06	...	1.50	...	2.22	...	0.75	...	3.21	...	0.34	...	...	...
Dean	13.36	*11.51	0.83	−1.15	2.17	−1.40	3.29	−0.96	4.66	−1.36	4.94	−0.65	1.41	−2.96	3.94	+0.11	5.25	+1.97	2.67	−0.35	3.06	+0.22	2.53	−0.47	48.11	−6.51
Eldon	3.01	+0.93	0.92	−1.80	1.63	−2.04	2.50	−2.23	5.60	+0.92	2.91	−1.90	1.45	−2.79	2.64	−1.31	2.67	−1.12	0.97	−1.79	2.08	−0.22	1.79	−0.54	28.17	†13.89
Fruit City	13.53	*10.71	1.52	−2.23	2.17	−0.78	3.42	+0.03	2.56	−1.81	5.55	+0.71	...	...	...	...	...	...	0.82	−1.94	2.89	−1.21	4.36	+1.40	...	...
Gano	8.77	+5.85	1.26	−1.56	2.41	−1.64	4.70	−0.39	3.64	−0.37	4.23	−0.12	0.34	−4.06	3.23	−0.40	5.69	+0.79	2.85	−0.89	2.43	+0.23	3.14	+1.28	42.69	−1.28
Goodland	12.38	+9.36	1.64	−1.46	1.48	−2.64	4.83	−1.28	4.45	+0.99	3.50	−0.03	2.56	−2.37	5.64	+2.66	5.12	+0.06	2.07	−1.75	3.15	+0.86	2.85	+0.67	49.67	−5.07
Hollister	13.20	*10.60	0.40	−3.02	1.33	−2.79	5.65	+1.91	2.00	−3.12	8.15	+4.08	0.40	−4.33	1.40	−2.85	4.57	+0.48	0.60	−2.51	5.60	+2.66	3.60	+0.93	46.90	−2.04
Houston	10.13	+7.95	0.78	−1.70	2.11	−2.55	4.86	+0.10	3.00	−1.45	6.16	+1.15	1.76	−3.00	1.78	−1.76	3.02	−0.97	0.79	−1.68	2.28	−0.26	3.85	+1.73	40.52	−2.44
Ironton	12.18	+9.17	1.64	−1.83	1.56	−2.84	3.80	−0.58	2.64	−2.29	3.84	−1.24	1.57	−3.00	4.11	+0.68	2.14	−1.35	1.20	−1.47	3.07	−0.64	5.84	+2.86	43.59	−2.53
Koshkonong	9.02	+5.82	0.96	−2.21	2.73	−1.37	3.97	−1.07	3.42	−1.01	6.24	+2.11	0.57	−3.75	3.31	−0.42	4.42	+0.79	0.88	−1.83	3.32	+0.33	5.00	+1.94	43.84	−0.67
Lebanon	9.33	+6.84	0.66	−1.48	2.08	−1.78	4.97	+0.36	6.28	+0.20	5.44	−0.07	1.35	−3.33	1.59	−1.61	2.43	−1.40	1.55	−1.08	2.69	+0.32	1.46	−1.21	39.83	−4.24
Lockwood	8.67	+7.23	0.55	−1.66	2.32	+0.03	4.50	+1.04	6.60	+2.09	8.03	+3.59	T.	−5.59	2.66	−1.41	2.57	−1.07	1.84	−1.19	2.87	+0.83	1.59	−0.37	42.20	−3.52
Mountain Grove	10.92	+8.38	0.56	−2.08	1.60	−2.64	4.07	−0.35	3.05	−1.04	6.91	+2.61	1.02	−3.49	1.31	−2.55	2.02	−2.15	0.82	−2.06	1.86	+0.26	2.72	−0.48	36.86	−4.63
Mount Vernon	14.12	*11.92	0.21	−2.63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Neosho	11.80	+9.44	0.84	−1.68	2.43	−1.01	4.97	+0.74	5.28	−0.89	7.35	+1.82	1.73	−2.69	3.35	−0.73	4.64	+0.55	1.46	−1.72	2.16	−0.72	1.75	−0.93	47.76	−2.18
Rolla	9.72	+7.41	1.72	−0.72	2.04	−1.48	4.05	−0.32	6.06	+0.96	4.51	+0.22	0.74	−3.40	5.04	+1.32	2.77	−1.03	1.35	−1.09	2.48	−0.06	1.84	−0.57	42.32	−1.26
Springfield	9.31	+6.65	0.57	−1.81	2.42	−1.67	5.15	+1.29	2.78	−2.77	5.00	−0.19	0.74	−4.05	4.45	+0.14	1.19	−2.57	1.24	−1.56	2.88	+0.24	2.07	−0.60	37.80	−5.68
Steelville	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.14	+0.40	1.81	−0.04	...	...
Sec. mns. and extr.	9.90	+7.56	0.98	−1.69	2.04	−1.77	4.10	−0.25	4.77	−0.47	5.37	+0.54	1.16	−3.32	2.79	−0.80	3.31	−0.51	1.37	−1.48	2.84	+0.15	2.71	+0.35	41.12	−0.92
Southwest Plain.																										
Amoret	5.07	...	0.50	...	3.05	...	3.58	...	3.25	...	7.23	...	1.55	...	2.85	...	3.16	...	1.87	...	3.58	...	1.66	...	37.35	...
Appleton City	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.35	−1.65	3.21	−0.28	2.18	−0.07	2.18	−0.16	0.86	−0.98	...	...
Clinton	8.01	+5.97	0.90	−1.06	4.75	+2.18	3.66	−0.55	5.87	+0.21	5.23	+0.27	0.67	−3.92	0.30	−3.05	2.52	−0.89	2.20	−0.17	2.35	+0.42	0.35	−1.51	36.81	−2.10
Harrisonville	6.65	+5.10	0.26	−1.91	4.36	+1.82	2.55	−0.98	7.06	+2.36	7.13	+2.50	2.09	−1.81	0.75	−3.28	4.62	+0.34	2.92	+0.34	3.00	+1.03	0.81	−1.10	42.20	+4.41
Lamar	7.16	+5.46	0.29	−2.06	4.82	+1.98	3.59	−0.52	5.53	−0.17	12.76	+7.86	T.	−4.46	3.58	−0.55	3.04	−1.09	1.35	−1.66	2.58	+0.40	1.54	−0.43	46.24	+4.76
Lamonte	8.27	+6.47	0.55	−1.47	3.92	+1.46	2.99	−0.64	6.33	+0.88	5.85	+1.05	T	−4.70	4.54	+1.06	5.49	+1.24	2.05	−0.05	...	...	0.50	−1.34	...	...
Marshall	7.22	+5.41	0.65	−1.31	5.13	+2.55	4.25	+0.49	5.52	+0.52	6.45	+1.75	0.50	−3.93	4.63	+0.99	2.16	−2.25	2.27	−0.16	2.35	+0.27	0.35	−1.44	41.48	+2.89
Nevada	5.02	+3.44	1.40	−0.78	3.92	+0.85	3.71	−0.09	3.43	−2.25	6.95	+1.63	0.46	−3.42	1.50	−2.09	2.31	−1.94	1.48	−1.13	1.80	−0.13	1.76	−0.26	33.74	−6.17
Osceola	...	...	...	...	...	...	4.24	+0.36	6.78	+0.86	7.23	+2.67	0.02	−4.48	...	...	...	...	...	...	...	...	...	...	...	...
Warrensburg	7.00	+5.21	0.59	−1.50	5.32	+2.97	3.84	+0.89	6.45	+1.55	6.07	+1.09	0.53	−3.71	2.67	−0.83	3.74	+0.03	3.56	+1.01	3.09	+1.28	0.47	−1.40	43.33	+6.55
Warsaw	8.55	+6.29	1.85	−1.13	4.28	+1.24	4.35	−0.01	7.14	+2.23	7.20	+1.94	2.03	−2.82	2.67	−1.58	4.66	+0.03	1.94	−1.68	3.23	+1.00	1.87	−0.52	49.77	+4.99
Waverly	5.90	...	0.63	...	3.57	...	3.57	...	7.96	...	7.70	...	T.	...	3.42	...	1.97	...	4.44	...	2.05	...	0.87	...	42.08	...
Sec. mns. and extr.	6.85	+5.11	0.76	−1.40	4.31	+1.88	3.64	−0.12	5.94	+0.69	7.25	+2.31	0.71	−3.69	2.66	−1.27	3.31	−0.60	2.39	−0.40	2.62	+0.51	1.00	−1.00	41.44	−2.19
Northwest Plateau.																										
Avalon	6.70	4.88	1.95	0.33	5.45	+2.77	3.43	−0.43	6.42	+1.45	...	...	0.95	−3.53	2.50	−1.47	2.45	−3.13	4.30	+0.71	1.85	−0.13	0.80	−0.93	...	...
Bethany	3.28	1.80	0.85	0.53	1.75	−0.56	2.85	−0.20	7.01	+1.88	6.90	+2.61	1.19	−3.51	4.87	+0.70	1.42	−2.22	1.57	−0.86	2.62	+1.14	0.22	−1.33	34.53	−1.08
Chillicothe	4.78	2.39	0.35	2.17	3.57	+0.78	2.50	2.77	6.96	+0.12	8.08	+1.30	0.83	−4.32	1.85	−3.00	2.90	−3.58	3.01	−1.22	1.69	−0.75	0.19	−1.84	36.71	†15.06
Conception	1.58	+0.56	0.50	0.74	1.12	−0.60	2.37	−0.38	7.15	+2.62	4.29	−0.15	3.90	−0.14	4.72	+1.01	3.26	−0.39	1.67	−0.92	2.64	+1.40	0.57	−0.51	32.77	+1.76
Gallatin	...	...	...	...	...	...	...	...	...	...	...	...	2.93	−1.83	1.76	−2.44	2.01	−2.23	2.42	−0.19	1.95	+0.16	0.27	−1.35	...	...
Grant City	3.01	+2.05	0.80	−0.43	1.25	−0.83	2.64	−0.31	7.04	+2.06	5.29	+1.03	1.32	−3.70	6.94	+3.08	1.52	−2.27	1.68	−1.11	2.59	+1.17	0.70	−0.57	34.78	+0.17
Kansas City	5.52	+1.39	0.57	1.09	4.46	+1.64	4.16	+0.87	5.36	+0.25	5.51	+0.85	0.38	−1.46	3.82	−0.93	4.96	+1.20	4.17	+1.96	2.83	+0.98	0.34	−1.02	42.08	4.64
Kidder	1.55	0.20	1.14	0.45	3.00	0.67	1.78	−1.30	7.90	+2.02	4.67	+0.22	1.29	−2.96	2.37	−1.67	2.66	−1.24	2.39	−0.33	1.98	+0.32	0.43	−0.99	31.16	−2.51
Lexington	6.22	+4.65	0.59	1.51	3.62	+1.18	3.19	0.09	6.29	+1.24	4.69	−0.38	0.06	−5.04	2.63	−0.61	3.44	−1.02	3.91	+1.33	2.40	+0.47	0.28	−1.59	37.32	−1.07
Liberty	4.59	+3.18	0.50	1.11	1.44	−2.05	4.32	+1.14	6.51	+1.08	7.02	+1.81	0.82	−3.92	3.20	−1.06	4.92	+1.19	4.86	+2.67	2.75	+1.09	0.24	−1.25	41.17	+6.84
Maryville	2.91	1.73	0.30	0.93	1.40	0.54	2.55	0.63	9.88	+4.58	4.43	−0.58	1.87	−3.69	4.81	+0.35	2.72	−0.84	1.76	0.65	2.70	+1.25	0.55	−0.67	35.88	−0.02
Oregon	2.02	0.55	0.35	1.38	1.52	0.52	3.62	+0.38	7.23	+2.37	4.70	0.04	3.43	0.96	4.22	+0.13	2.74	0.95	1.70	−0.90	2.56	+0.93	0.49	−1.05	34.58	1.12
St. Joseph	2.56	1.49	0.47	0.71	2.98	+0.97	2.96	0.17	7.79	+3.42	3.31	−1.75	1.18	−2.80	4.24	+0.39	3.51	+0.43	1.78	−0.81	3.11	+1.28	0.48	−0.55	34.37	+1.19
Tarkio	1.37	+0.53	0.21	0.89	0.17	−1.62	3.26	+0.31	9.76	+5.16	5.71	+0.78	1.23	−2.72	4.39	+0.27	4.55	+1.09	1.77	0.80	2.53	+1.28	0.97	−0.01	35.90	+0.28
Trenton	3.65	2.25	0.55	1.14	2.68	+0.41	3.12	+0.18	7.98	+2.91	5.17	+1.33	1.01	−2.81	5.19	+1.69	2.57	−1.59	2.18	−0.46	2.00	+0.35	0.41	−1.14	36.51	+1.58
Sec. mns. and extr.	3.77	2.55	0.65	0.97	2.67	+0.59	3.05	0.29	7.38	+2.00	5.37	+0.52	1.19	−3.26	3.90	−0.27	3.04	1.19	2.61	0.11	2.46	+0.84	0.46	−0.98	36.45	−0.38
State mns. and extr.	7.36	5.16	0.98	1.48	2.54	0.65	3.23	0.69	5.61	+0.89	6.99	+1.17	1.25	−3.15	4.05	+0.49	2.94	−0.86	2.17	−0.54	2.49	+0.14	1.85	−0.29	40.38	+0.19

* indicates plus, (+).

† indicates minus, (−).

Monthly and Annual Mean Temperatures for the Year 1916, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain.																										
Brunswick	27.2	−1.3	28.4	0.0	44.0	+2.3	52.0	−2.4	63.7	−0.4	69.0	−4.4	81.4	+4.4	78.6	+3.1	67.0	−1.3	56.9	+0.3	45.2	+2.9	28.8	−3.3	53.5	0.0
Clifton Hill	....	....	....	....	....	....	....	....	....	....	68.3	....	....	....	79.8[d]	....	68.4	....	58.0	....	48.0	....	30.0	....	....	....
Columbia	30.6	+3.4	29.8	−0.4	44.7	+3.3	53.0	−1.3	65.0	+0.5	69.0	−5.5	81.4	+4.0	79.0	+4.3	66.8	−1.0	58.0	+3.2	46.4	+4.0	29.8	−3.1	54.5	+0.9
Fayette	27.2	−0.7	26.9	−2.2	43.4	+0.9	52.0	−3.1	64.9	+0.7	69.2	−4.0	83.0	+5.8	79.9	+3.9	66.9	−2.0	56.6	−0.4	45.7[a]	+2.6	30.6[b]	−1.5	53.9	0.0
Fulton	31.6	+0.5	31.2	+1.6	45.7	+0.7	53.4[a]	−0.7	65.4	+0.5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	28.8	+2.1	27.4	−1.7	41.8	+0.2	51.8	−1.8	63.9	−0.5	68.0	−5.3	81.8	+4.4	77.7	+2.7	66.2	−1.7	55.8	−0.1	45.6	+5.1	27.9	−3.4	53.1	0.0
Jefferson City	31.0	+0.6	30.6	−0.2	45.2	+1.7	53.6	−3.3	65.2	0.0	71.2	−2.9	82.4	+4.4	79.0	+2.4	67.9	−1.2	58.4	+1.8	47.0	+2.7	30.2	−2.9	55.1	+0.3
Louisiana	27.6	−0.1	30.3	+2.2	45.2	+2.6	54.2	+0.8	62.5	−1.4	68.8	−2.8	80.5	+4.3	78.3	+3.4	66.5	−1.4	56.8	+1.0	47.5	+3.4	32.4	+1.4	54.2	+1.1
Macon	26.4	−5.2	25.6	−1.3	39.9	−0.6	50.4	−3.8	62.6	−1.5	67.6	−4.5	82.4	+5.3	77.4	+0.8	65.8	−2.8	54.4	−3.1	44.0	−0.2	26.8	−3.9	51.9	−1.7
Mexico	28.8	−0.2	27.6	−1.0	42.0	−0.3	52.1	−2.2	64.8	+0.3	69.0	−4.6	81.1	+3.9	78.0	+1.9	66.9	−1.9	56.0	−0.5	45.5	+2.4	28.0	−4.2	53.3	−0.5
Oakfield	33.9	+1.7	33.0	+1.3	45.1	−0.6	54.2	−1.8	66.8	+0.8	70.1	−3.7	82.2	+4.7	79.1	+2.2	68.0	−2.6	59.8	+1.0	49.4	+3.1	33.8	−0.9	56.3	+0.4
Palmyra	27.9	−0.4	25.1	−1.7	39.0	−0.4	50.8	−3.8	62.4	−4.0	67.0	−7.4	81.8	+2.7	77.2	+0.5	65.0	−3.6	58.6	+1.2	43.4	+0.3	25.6	−4.6	52.0	−1.8
St. Catharine	26.5	....	26.3	....	42.2	....	50.8	....	62.4	....	67.3	....	80.4	....	76.5	....	66.0	....	55.7	....	44.3	....	27.2	....	52.1	....
St. Charles	32.6	+1.4	31.8	+0.3	43.8	−0.2	54.1	−1.3	66.9	+5.5	70.4	−3.2	82.8	+5.4	78.8	+2.4	67.5	+0.3	58.7	+1.0	48.8	+3.5	33.4	−1.6	55.8	+1.1
St. Louis(1)	34.1	+3.1	32.8	−0.7	45.0	+1.5	54.4	−1.7	68.0	+1.5	71.5	−3.6	84.2	+5.1	78.7	+1.5	68.3	−1.7	59.2	+0.8	49.2	+5.8	33.6	−1.9	56.6	+0.8
St. Louis(2)	33.4	....	31.6	....	44.1	....	53.9	....	67.7	....	71.0	....	84.4	....	78.8	....	67.8	....	58.0	....	48.4	....	32.6	....	56.0	....
Steffenville	23.2	−0.5	27.4	+0.7	41.8	+0.1	52.1	−0.6	64.4	0.0	69.6	−3.3	84.8	+7.4	79.8	+3.0	67.5	−1.1	56.8	−0.4	44.7	+0.9	29.1	−1.3	53.8	+0.4
Unionville	22.5	−0.8	23.0	−1.0	38.2	+0.4	48.1	−2.8	60.4	−2.4	65.0	−7.2	81.0	+4.1	75.4	−0.3	65.6	−1.7	55.2	+0.1	41.4	+1.4	23.1	−4.3	49.9	−1.2
Warrenton	30.5	+1.1	24.0	−5.2	41.5	−0.1	52.2	−2.5	64.8	−0.2	70.2	−3.4	83.1	+5.5	79.5	+2.3	67.3	−1.6	56.4	+0.7	45.4	+2.4	28.8	−3.5	53.6	−0.4
Sec. mns. and extr.	29.4	+0.3	26.8	−0.8	42.9	+0.8	52.4	−1.9	64.5	+0.2	68.9	−4.2	82.1	+4.9	78.4	+2.4	66.9	−1.7	57.2	+0.4	46.1	+2.7	29.5	−2.6	53.9	0.0
Southeast Lowlands.																										
Cardwell	43.6	....	41.8	....	50.8	....	59.2	....	72.5	....	75.8	....	83.4	....	81.8	....	71.0	....	61.2	....	50.0	....	....	....	....	....
Caruthersville	43.2	+3.9	41.0	+3.6	50.5	−0.6	59.2	−0.5	73.0	+4.0	76.3	−1.0	84.4	+4.6	82.7	+3.6	71.8	−1.3	63.0	+2.4	52.5	+2.9	40.4	+0.6	61.5	+1.8
Doniphan	38.2	+0.7	38.6	+1.1	48.6	−0.5	57.8	+0.2	69.4	+2.7	72.1	−2.7	82.4[e]	+4.6	81.4	+3.8	71.3	0.0	59.7	+2.0	48.9	+0.9	37.3	−0.2	58.8	+1.0
Jackson	38.1	+3.8	37.6	+2.8	49.6	+2.2	56.2	−0.3	69.2	+3.8	72.3	−1.5	82.1	+5.6	79.8	+4.0	69.3	−0.8	58.9	+1.8	48.8[a]	+2.0	36.2	−0.6	58.2	+1.9
Marble Hill	38.7	+4.3	35.4	+0.7	46.0	−1.5	56.4	+0.3	67.0	+1.1	68.2[a]	....	82.2	+5.1	79.6	+2.7	68.8	−2.0	60.4	+2.9	50.0	+6.1	34.8	−1.1	57.3	+1.7
Poplar Bluff	43.8	+6.4	39.4	+1.2	47.0	−1.3	56.2	−3.7	68.4	−0.2	71.8	−3.5	81.8	+3.1	79.9	+1.7	69.3	−2.6	59.2	−0.8	47.2	−0.5	35.0	−2.2	58.2	−0.2
Sikeston	42.4	+5.0	39.4	+3.6	49.3	+0.7	57.7	−0.4	71.4	+4.1	74.0	−0.6	82.1	+3.7	80.7	+3.1	69.2	−1.7	....	....	47.8[h]	−0.5	37.2	−0.9	....	....
Cairo, Ill.	40.0	+5.2	37.2	−0.4	46.5	−0.5	56.6	−1.7	70.3	+2.8	73.1	−2.1	82.2	+3.6	79.4	+2.4	69.6	−0.6	60.6	+1.5	50.7	+3.8	37.7	−0.8	58.7	+1.1
Sec. mns. and extr.	41.0	+5.3	38.8	+1.8	46.0	−0.2	57.4	−0.9	70.2	+2.6	73.3	−1.9	82.6	+4.3	80.5	+3.0	70.0	−1.3	60.3	+1.6	49.7	+2.5	36.9	−0.7	58.8	+1.2
Ozark Plateau.																										
Birchtree	36.3[b]	+1.6	37.1	+3.1	47.2	−0.6	54.6[a]	−2.4	66.2	+0.9	70.0[a]	−2.7	80.4[a]	+4.2	78.6[c]	+2.5	65.6[e]	−4.3	60.0[c]	+2.0	47.2[b]	+0.6	35.2	−0.6	56.5	+0.4
Bolivar	34.6	−0.2	34.6	+1.2	50.0	+3.5	54.6	−1.5	67.2	+1.5	71.1	−1.9	80.5	+3.5	81.5	+4.3	67.4	−3.0	58.4	−0.1	46.0	−1.1	32.3	−3.5	56.5	+0.2
Cassville	35.6[e]	....	....	....	....	....	54.4	....	63.4	....	69.9	....	77.6	....	79.4	....	67.4	....	57.7	....	47.5	....	33.1	....	....	....
Crocker	32.5	....	34.9	....	44.8[h]	....	56.4	....	65.0	....	70.5[b]	....	82.5	....	81.8[a]	....	70.4[e]	....	62.2[a]	....	56.1	....	34.0	....	57.6	....
Dean	44.2	+6.9	37.1[a]	+1.2	51.6[b]	+2.3	55.0[c]	−1.3	66.4[a]	+0.3	68.9	−4.1	80.2	+2.5	80.0	+2.0	69.8	−1.5	59.6	−0.6	48.8	−1.1	35.2[a]	−2.7	58.2	+0.3
Eldon	32.0	−0.6	31.6	+0.6	45.9	+3.5	51.8[d]	−4.7	64.4	−.09	70.6	−3.3	80.8	+3.3	78.8	+2.2	67.2	−2.5	58.4	−0.2	47.0	+1.3	31.0	−3.6	55.0	−0.4
Fruit City	37.7	....	38.2	....	48.0	....	57.3	....	68.7	....	71.0	....	....	....	....	....	....	....	60.4	....	51.0	....	36.0	....	....	....
Gano	33.2	−1.1	34.6	+0.2	46.6	−0.1	54.6	−1.8	66.9	+1.0	70.0	−2.8	81.6	+4.5	79.0	+2.4	67.6	−2.7	58.8	+0.8	48.2	+0.6	33.3	−2.4	56.2	−0.1
Goodland	34.8	+0.8	35.2	+0.3	45.2	−0.1	53.0	−1.7	63.6	+0.1	68.2	−2.6	78.5	+4.0	76.8	+2.4	65.6	−2.7	56.4	+0.7	46.0	+0.1	34.1	−0.8	54.8	0.0
Hollister	39.8	+3.5	40.7	+2.8	53.2	+4.8	56.4	−3.7	69.5	+2.0	74.8	−1.0	85.2	+5.9	84.6	+6.9	71.1	−0.7	60.2	−0.1	49.8	+1.7	35.9	−3.8	60.1	+1.5
Houston	34.6	+0.6	37.1	+3.8	47.8	+1.0	55.8	+0.2	66.8	+2.0	70.4	−1.5	79.3	+3.5	80.0[e]	+4.8	67.8[c]	−1.0	59.5[a]	+2.5	49.7	+3.3	34.5	−1.5	56.9	+1.5
Ironton	35.4	+3.1	35.0	+1.6	45.2	+0.1	53.8	−1.6	66.6	+2.0	69.6	−2.4	79.4	+3.8	77.4	+3.1	66.2	−1.5	56.8	+0.9	46.1	+2.1	32.6	−1.8	55.3	+0.9
Koshkonong	37.6	+0.4	39.2	+2.4	49.6	+0.3	57.5	−0.5	68.4	+1.3	71.8	−2.4	83.0	+4.7	81.2	+2.7	70.0	−1.1	61.0	+1.2	52.3	+2.5	37.6	+0.1	59.1	+1.0
Lebanon	33.5	−0.1	33.4	−0.3	46.8	+0.7	53.1	−3.4	66.3	+0.2	70.6	−2.7	81.2	+4.3	80.3	+4.0	70.4	+0.3	59.0	+0.5	48.5	+2.1	31.2	−4.2	56.2	+0.1
Lockwood	32.8	−1.3	33.3	−1.7	49.4	+2.3	54.8[d]	−1.6	66.8	+2.3	71.2	−3.1	81.5	+4.4	81.8	+4.9	70.2[a]	−1.8	60.6	+2.6	46.5	−2.1	34.0	−1.9	56.9	+0.2
Mountain Grove	34.3	+0.1	34.8	+1.0	44.8	−1.2	52.4	−2.4	65.6[a]	+1.2	69.8	−2.0	79.4	+3.3	80.4	+4.9	67.8	−1.1	58.6	+1.1	47.4	+0.1	32.0	−2.7	55.6	0.0
Mount Vernon	36.2	+1.2	35.3[g]	+2.0	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Neosho	37.2	+2.1	37.4	+1.1	51.8	+3.9	55.3	−2.8	67.2	+0.9	71.6	−2.2	79.0	+1.3	80.8	+3.8	68.0	−2.6	57.4	−1.9	46.8	−0.6	35.8	−0.9	57.4	+0.2
Rolla	32.8	+1.1	31.0	−4.1	43.8	−1.1	53.3	−2.1	65.1	+0.5	69.8	−2.8	82.4	+5.0	79.0	+3.4	67.8	0.0	59.0	+3.8	49.4	+4.9	31.0	−2.5	55.4	+0.5
Springfield	33.8	+2.5	34.0	+0.4	47.8	+4.3	52.8	−2.9	65.8	+1.2	70.0	−2.3	80.6	+4.2	78.8	+4.0	68.2	+0.3	59.4	+2.1	48.3	+3.9	33.2	−2.3	56.1	+1.3
Sec. mns. and extr.	35.5	+1.2	35.7	+0.8	47.9	+1.1	54.6	−1.8	66.0	+0.7	70.5	−2.5	80.7	+3.8	80.0	+3.5	68.2	−1.6	59.0	+1.0	48.6	+1.1	33.8	−2.2	56.7	+0.5
Southwest Plain.																										
Amoret	30.0	....	32.8	....	49.2	....	53.8	....	65.8	....	70.8	....	80.8	....	81.0	....	67.8	....	59.2	....	46.5	....	30.5	....	55.7	....
Appleton City	....	....	....	....	....	....	....	....	....	....	....	....	....	....	82.3	+4.7	68.6	−2.2	60.0	+1.0	48.0	+1.9	32.2	−2.1	....	....
Clinton	31.2	−1.5	32.3	....	49.2	....	54.6	....	67.0	+1.3	71.4	....	82.9	....	81.7	....	69.2	....	59.8	+1.4	48.4	+1.0	33.4[b]	−1.1	56.8	....
Harrisonville	26.8	−0.5	30.2	+0.7	44.4	+3.9	52.0	−2.0	65.0	+1.2	70.1	−3.1	81.3	+3.9	80.4	+5.1	67.4	−0.9	56.4	+0.3	43.8	+1.4	27.7	−3.5	53.8	+0.5
Lamar	33.7	+1.0	33.4	−0.7	48.0	+1.3	53.2	−3.7	67.0	+1.3	71.8	−2.1	81.9	+3.8	81.7	+4.5	69.7	−0.7	60.6[a]	+1.8	48.6	+1.9	32.8	−2.7	56.9	+0.5
Lamonte	29.0	....	29.9	....	44.4	....	52.4	....	63.8	....	70.4	....	84.6	....	79.8	....	64.7	....	57.6	....	....	....	29.8	....	....	....
Marshall	28.8	+0.6	30.0[c]	+1.3	43.0[c]	+1.5	52.6	−1.4	64.1[c]	−0.1	69.0	−3.8	81.0	+4.2	78.2	+2.2	67.2[a]	−1.4	56.6[a]	−0.4	45.8	−1.0	30.0[a]	−1.3	53.9	0.0
Nevada	32.0	+0.2	33.6	+2.4	49.8	+6.0	54.2	−1.2	67.0	+2.0	71.8	−1.5	82.0	+5.2	80.8	+4.1	69.4	0.0	60.2	+3.1	48.8	+4.0	33.8	−0.2	57.0	+2.0
Warrensburg	29.4	+0.7	30.8	−0.1	46.6	+3.3	54.0	−2.0	66.7	+1.3	71.6	−2.4	84.2	+5.6	82.0	+5.0	68.9	−1.1	59.3	+1.1	46.8	+1.8	29.7	−4.1	55.8	+0.8
Warsaw	33.4	+0.2	33.6	−0.7	49.0	+2.3	52.4	−3.7	65.8	−0.1	70.4	−3.4	81.0	+2.8	80.4	+2.2	67.4[a]	−4.0	59.3	+1.1	47.1	−0.7	32.5	−2.8	56.0	−0.6
Sec. mns. and extr.	30.1	−0.1	31.8	+0.1	47.2	+2.5	53.2	−2.6	65.9	+0.9	70.8	−2.9	82.2	+4.1	80.7	+3.7	67.9	−1.8	58.9	+0.9	47.1	+1.3	31.2	−2.2	55.7	+0.5
Northwest Plateau.																										
Avalon	28.2	+0.2	28.2	+1.3	45.4	+3.5	53.2	+0.3	65.1	+0.8	....	....	83.8	+6.4	78.9	+1.7	69.8	+0.7	59.8	+1.8	47.9	+3.7	30.0	−0.5	....	....
Bethany	23.4	−1.3	24.6	−1.3	42.4	+3.3	47.8	−3.1	62.6	+0.2	67.5	−4.5	81.0	+5.8	77.0	+2.7	66.4	−0.3	55.2	+1.0	42.2	−1.3	23.1	−8.1	51.1	−0.6
Conception	22.1	−2.9	26.1	0.0	41.2	+2.2	49.9	−2.1	62.4	+1.3	67.3	−3.4	79.0	+3.4	....	....	66.0	−1.0	53.2	−2.2	....	....	23.9	−5.8	....	....
Grant City	23.0	−1.8	24.7	−1.3	41.4	+0.9	50.5	−1.1	62.8	+0.6	67.6	−3.6	81.4	+5.4	76.6	+1.1	66.4	−0.6	54.6	−0.6	42.5	−0.3	25.0	−3.0	51.4	−0.4
Kansas City	27.4	−1.2	30.2	+0.3	45.8	+5.0	52.6	−1.7	65.4	+0.9	70.5	−2.5	83.3	+5.7	78.9	+3.1	67.8	+0.3	57.4	+1.6	46.9	+5.4	29.9	−1.6	54.7	+1.3
Kidder	25.8	−0.4	27.2	+0.8	42.3	+1.5	50.8	−1.8	60.9	−2.1	66.4	−5.8	81.4	+4.9	77.8	+2.7	66.3	−1.3	55.6	−0.7	44.2	+2.0	29.0	−0.5	52.3	−0.1
Lexington	27.4	−0.1	29.2	+0.6	43.8	+0.7	53.2	−1.0	65.4	+1.4	70.2	−2.0	81.4	+4.9	78.9	+3.3	67.3	−1.3	57.4	−0.2	46.3	+2.3	30.4	−1.3	54.2	+0.6
Liberty	25.8[a]	−2.9	30.6[a]	+1.7	46.5	+4.0	53.6[a]	−1.4	65.4[b]	+1.4	71.4	−1.9	82.8[c]	+5.5	79.4[a]	+3.1	68.3[b]	−0.8	59.2[h]	+1.8	46.2	+2.5	29.5	−2.4	54.9	+0.9
Maryville	19.2	−3.6	23.4	+0.4	39.0	+1.9	48.8	−2.1	61.3	−1.1	67.2	−4.0	79.9	+3.8	74.8	−0.2	63.6	−2.4	52.0	−1.6	40.2	+0.8	23.0	−3.4	49.4	−1.0
Oregon	22.4	−1.4	25.7	−2.3	42.2	+3.3	49.8	−2.9	61.2	−2.1	67.2	−5.1	80.0	+4.6	75.6	+0.5	65.4	−1.7	54.4	−0.5	43.0	+2.8	24.8	−3.7	51.0	−0.7
St. Joseph	24.2	....	27.0	....	43.2	....	51.8	....	64.2	....	69.6	....	82.3	....	78.3	....	67.3	....	56.1	....	44.8	....	27.0	....	53.0	....
Tarkio	21.1	−0.9	27.6	+0.8	42.8	+4.0	50.6	−2.7	62.8	−0.8	68.4	−4.4	80.2	+3.4	76.2	+0.3	66.5	+0.3	55.6	+0.1	42.4	+2.3	24.6	−0.6	51.6	+0.2
Trenton	25.2	−1.9	26.0	−1.3	43.2	+2.7	51.7	−1.1	63.8	−0.2	68.7	−3.8	81.4	+4.7	77.8	+2.4	66.6	−0.9	55.2	−1.3	43.5	+0.9	26.2	−3.6	52.4	−0.3
Sec. mns. and extr.	24.2	−1.3	27.0	−0.1	43.0	+2.7	51.1	−1.6	63.3	+0.2	68.5	−3.7	81.4	+5.0	77.5	+2.0	66.7	−0.8	55.8	+0.1	44.2	+1.9	26.8	−2.9	52.4	0.0
State mns. and extr.	31.6	+0.7	31.4	+0.2	47.0	+1.3	53.5	−1.8	65.6	+0.7	70.0	−3.2	81.6	+4.6	79.2	+2.9	67.8	−1.5	58.0	+0.7	46.9	+1.9	31.3	−2.3	55.2	+0.3

Monthly Maximum Temperatures for the Year 1916, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date
Northeast Plain.																								
Brunswick	62	4	62	22	82	21	81	12	89	24	92	30	99	25	100	12	95	5	91	6†	81	5	71	7
Clifton Hill	....	....	....	....	....	....	....	....	....	....	96	30	104	25†	103	3	97	5	91	5	80	5	68	7
Columbia	63	5	63	22	86	21	84	12	89	24	93	30	100	31	100	12	96	5	89	8	80	5	66	7
Fayette	63	5	61	22	85	21	80	11†	89	24	94	30	104	28	102	3	94	5	90	5	81	5	67	1
Fulton	65	26	70	22	86	21	84	12	89	7†	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	61	1	60	22	81	24	84	12	89	21	94	30	101	25	99	7	94	5	88	8	79	5	66	7
Jefferson City	65	5†	69	22	86	21	84	12	89	24	95	30	103	25	100	7†	94	5†	90	4†	81	5	70	3
Louisiana	62	1†	67	22	82	25	85	12	88	24†	96	30	104	26	104	4†	95	5	90	8	79	7	76	4
Macon	62	4	59	22	80	21	81	12	87	7†	93	30	103	28	100	4†	95	5	88	8	79	5	69	7
Mexico	62	4	66	22	83	21	83	11	91	24	96	30	103	31	101	7	97	5	91	8	81	5	67	7
Oakfield	65	1†	70	22	83	21	85	12	91	25†	95	30	102	31	102	4†	97	5†	90	5†	82	5	72	3
Palmyra	63	4†	59	17†	73	21	83	12	89	24	92	29	103	25	102	4†	94	5	87	8	78	7	67	7
St. Catharine	59	1	59	22	77	21	79	12	85	24	91	30	100	31	99	5	93	5	87	8	77	5	67	7
St. Charles	65	1†	71	22	80	13†	85	12	91	26	96	30	103	25	100	4	94	7	90	5	83	4	72	4
St. Louis(1)	65	1	68	22	80	13	85	12	91	25	95	30	99	31	96	4	94	5	86	7	79	4	71	4
St. Louis(2)	64	1†	68	22	80	13†	87	12	91	25†	95	30	100	31	97	20	95	6	87	5	79	4	72	4
Steffenville	61	5	62	22	82	24	82	11†	90	25	100	30	109	28†	107	4	99	5	92	5†	82	5	72	3
Unionville	58	1†	60	20	76	20†	82	12	86	25	93	30	104	31	98	5	95	5	91	8	81	5	69	3
Warrenton	64	26	69	22	82	21	87	12	91	24†	97	30	103	25	103	3	99	5	88	5	80	5	65	3†
Southeast Lowlands.																								
Cardwell	72	3	74	17	82	13	84	18	95	13†	99	22	101	31	103	18	100	5†	94	7	83	4	....	....
Caruthersville	71	1†	72	17	81	13	82	22†	96	13	98	30	101	16	100	11†	96	6†	92	7†	82	4†	76	4
Doniphan	66	1	75	17	82	13	85	21	91	10†	95	30	99	31	100	14†	98	6†	87	7	80	4	75	4
Jackson	66	27	73	20	84	11†	83	12	96	10	99	22†	101	25	103	18	98	6†	93	7	82	4	75	4
Marble Hill	65	25†	70	17	80	21†	89	9	91	26	....	....	102	24	102	11	98	6	90	7†	85	4	75	4
Poplar Bluff	67	2†	76	17	81	14†	83	22	91	14†	94	23	98	17†	100	12	98	6	92	8	78	2	72	7
Sikeston	69	1	70	17	81	13†	82	12†	93	10†	96	30	100	17	100	20	87	4†	....	....	....	....	74	4
Cairo, Ill.	67	12	67	17	78	21	78	19	90	26	93	30	96	25	96	20	92	6	89	7	80	4	74	4
Ozark Plateau.																								
Birchtree	64	1	71	20	84	13†	82	12	87	5†	92	30	100	31	99	1	93	5†	89	5†	80	5	73	4
Bolivar	67	26	73	21	90	21	83	11	91	24	94	29†	101	31	106	12	98	5	83	8†	73	1†	70	4
Cassville	65	1†	....	....	....	....	79	3	87	23	88	3	96	15†	99	28	97	2	86	8	82	1	74	3
Crocker	66	5†	68	22	81	16	83	12†	87	7†	89	4†	103	15	103	23	97	8	84	7†	83	8	69	4
Dean	65	1†	75	25	91	21	81	18	89	24	92	29	102	17	102	12†	95	4†	91	8	83	2	73	3
Eldon	64	25	69	20	87	21	80	18	90	24	94	30	102	17†	100	21	94	5	90	5†	82	4†	74	3
Fruit City	65	5†	70	21	84	13	82	12	89	6	94	30	....	....	....	....	....	....	84	27	81	4	74	4
Gano	65	1	68	21	85	21	85	12	93	10	96	30	104	25	102	20	98	7	91	7	81	4†	71	3
Goodland	64	1	71	20	83	13†	83	12	91	10	94	30	100	31	97	20	93	5†	87	7	81	4	71	4
Hollister	72	5	78	20	88	21	82	23†	92	24	94	29	106	15†	106	13	98	4†	92	6†	82	1†	82	3
Houston	63	1	70	20	88	21	93	23	90	10	95	30	99	14†	98	12†	93	5†	85	7	80	1	73	3
Ironton	64	1†	71	17†	84	21	84	12	92	10	95	30	102	31	97	19†	95	6	89	6†	82	4	73	4
Koshkonong	66	5	75	17	86	21	82	12†	91	10	90	30	103	31	100	12†	98	5†	90	7	83	4	75	3†
Lebanon	66	5	75	21	84	13	85	11†	93	24	97	30	103	27	104	7	101	5	91	7	83	11	75	3
Lockwood	63	5	60	21†	89	21	80	11†	90	24	91	21†	102	31	101	12†	95	5	90	7†	79	1†	76	3
Mountain Grove	62	1†	70	21	89	21	83	12	88	10	91	30	101	31	101	12†	95	5	91	5	80	4	73	3
Mount Vernon	68	1	73	21	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Neosho	67	4	74	21	91	21	81	18†	89	24	91	29	98	16	100	13†	95	5†	84	8†	77	4†	71	7
Rolla	65	1	67	22	88	21	87	12	90	24	95	27†	103	30	101	12	99	5	91	6†	84	4	75	3
Springfield	64	5	71	21	88	21	80	18	87	24	88	30	96	31	95	12	92	5	87	5	78	4	74	3
Southwest Plain.																								
Amoret	65	5	72	21	95	21	84	12	94	24	90	24	104	31	104	20	94	5	93	8	82	5	70	3
Appleton City	....	....	....	....	....	....	....	....	....	....	....	....	....	....	104	19	94	5	90	4†	81	4†	67	2†
Clinton	62	24	68	21	83	13	85	18	94	24	95	29†	103	15	103	7†	96	5	92	8	84	4	74	3
Harrisonville	63	4	63	22	90	21	82	11	92	24	93	29†	102	16	104	12	99	5	90	4†	79	5†	67	3
Lamar	66	26	76	21	92	21	82	11	91	24	93	29	103	31	105	12	97	5	95	5	83	1†	75	3
Lamonte	64	5	61	22	85	21	79	11†	92	24	94	30	102	16†	102	2	93	6	92	6	....	....	65	4
Marshall	64	4	63	22	85	21	81	12	90	24	95	30	102	25	102	3	94	5	90	8	80	5	70	7
Nevada	64	5	76	22	92	21	80	11†	91	24	92	29	102	15†	104	12	97	5	91	5	82	5	71	3
Warrensburg	63	24	66	21	90	21	82	11	95	24	99	30	106	25†	106	3†	98	5	94	8	84	5	69	7
Warsaw	65	5†	72	21	90	21	84	12	94	24	95	30	104	31	105	7	97	5	93	8	83	4	75	3
Northwest Plateau.																								
Avalon	62	5	59	22	83	21	82	12	88	24	....	....	104	25	102	2	98	5	90	5†	78	4†	68	3
Bethany	59	24	56	19†	80	12	81	12	89	26	95	30	102	25†	102	4	96	5	91	4	78	2	62	3
Conception	58	4†	56	21	81	21	88	12	88	6	89	30	94	12†	....	....	94	5	88	4	....	....	65	4
Grant City	56	24	56	20	79	12	88	12	96	6	95	30	103	28	103	4	98	5	91	4	77	3†	65	4
Kansas City	62	5	62	16	89	21	80	11	91	24	91	30	100	16	99	3	95	5	88	8	79	5	66	4
Kidder	62	4	56	19	84	21	83	12	87	24†	92	29	104	28	103	4	98	4	90	8	78	3†	69	7
Lexington	62	1	64	22	87	21	82	12	90	24†	93	30	101	16	100	3†	95	5	90	8	80	5	66	3
Liberty	61	5	62	16†	89	21	82	12	94	24	95	30	102	25†	103	12	96	5	89	5†	81	5	67	3
Maryville	59	4	59	21	82	21	90	12	92	6	94	30	100	25†	101	4	99	5	86	7	79	3	66	4
Oregon	59	4	56	21	84	21	85	12	86	6	92	29	97	16	96	4†	95	5	85	4†	79	3	69	4
St. Joseph	61	4	58	19	88	21	85	12	91	24	92	30	100	28	102	4	97	5	89	8	79	3	66	4
Tarkio	60	4	57	19†	82	12	89	12	90	6	90	30	99	31	98	4†	96	4†	89	4	78	3	67	4
Trenton	60	5	52	19†	76	21	81	12	89	26	92	30	98	30	98	4†	94	5	86	8	75	6	59	3†

† also on other dates.

Monthly and Annual Mean Temperature of Each Section for the Year 1916, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain	29.4	0.3	26.8	−0.8	42.9	+0.8	52.4	−1.9	64.5	+0.2	68.9	−4.2	82.1	+4.9	78.4	+2.4	66.9	−1.7	57.2	+0.4	46.1	+2.7	29.5	−2.6	53.9	0
Southeast Lowlands	41.0	5.3	38.8	−1.8	46.0	−0.2	57.4	−0.9	70.2	+2.6	73.3	−1.9	82.6	+4.3	80.5	+3.0	70.0	−1.3	60.3	+1.6	49.7	+2.5	36.9	−0.7	58.8	+1.2
Ozark Plateau	35.5	+1.2	35.7	+0.8	47.9	+1.1	51.6	−1.8	66.0	+0.7	70.5	−2.5	80.7	+3.8	80.0	+3.5	68.2	−1.6	59.0	+1.0	48.6	+1.1	33.8	−2.2	56.7	+0.
Southwest Plain	30.1	−0.1	31.8	+0.1	47.2	+2.5	53.2	2.6	65.9	+0.9	70.8	−2.9	82.2	+4.1	80.7	+3.7	67.9	−1.8	58.9	+0.9	47.1	+1.3	31.2	−2.2	55.7	+0.
Northwest Plateau	24.2	−1.3	27.0	−0.1	43.0	+2.7	51.1	−1.6	63.3	+0.2	68.5	−3.7	81.4	+5.0	77.5	+2.0	66.7	−0.8	55.8	+0.1	44.2	+1.9	26.8	−2.9	52.4	0
State	31.6	+0.7	31.4	+0.2	47.9	+1.3	53.5	−1.8	65.6	+0.7	70.0	−3.2	81.6	+1.6	79.2	+2.9	67.8	−1.5	58.0	+0.7	46.9	+1.9	31.3	−2.3	55.2	+0.

Monthly Minimum Temperatures for the Year 1916, with Dates.

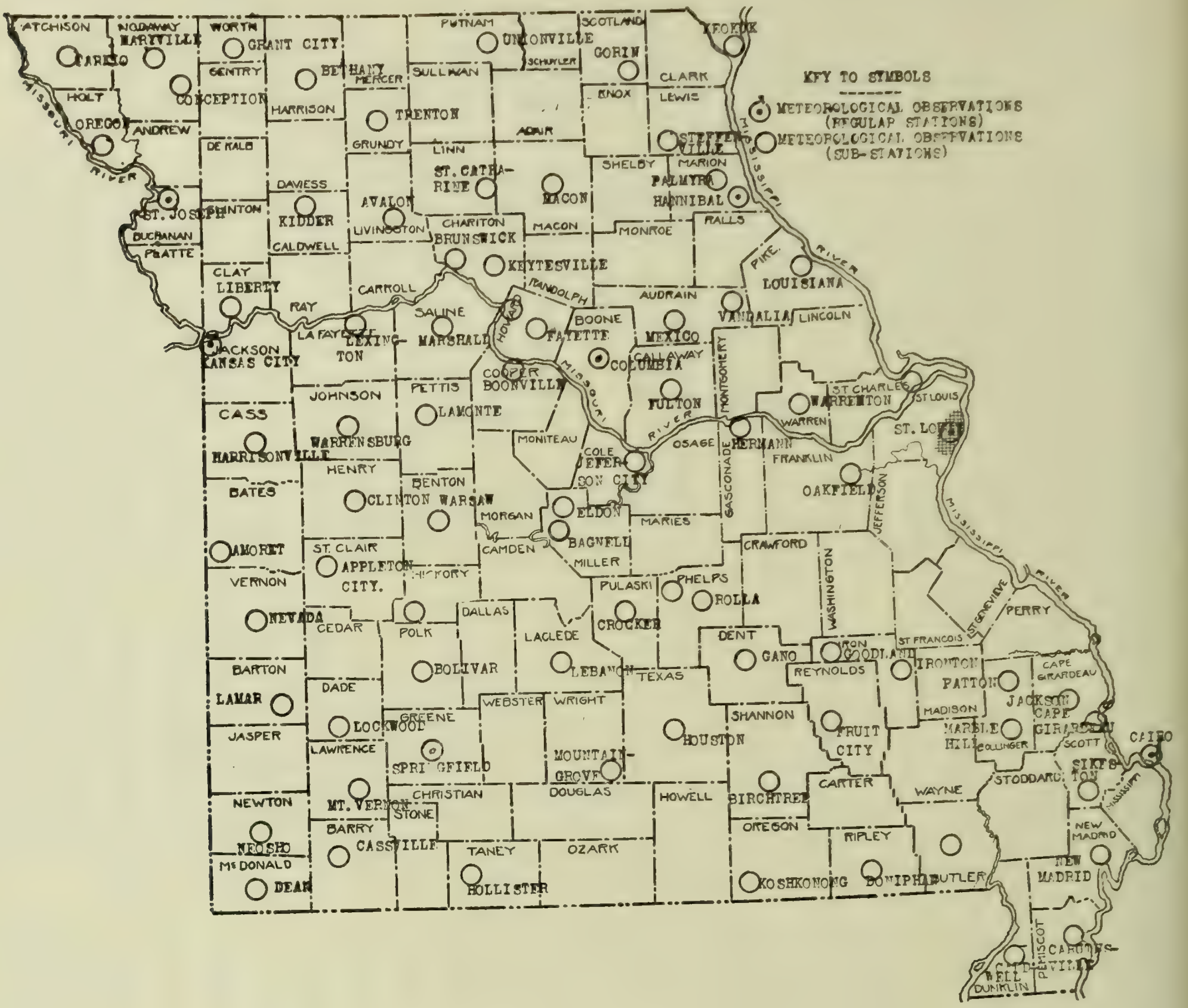
Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
Northeast Plain.																								
Brunswick	−15	13†	2	2	9	3†	29	6†	41	18	51	7†	62	10	48	28	34	29	25	21	11	14	−6	22
ton Hill	....	....	....	....	....	....	....	....	....	....	51	7†	....	....	44	28	32	29	23	21	12	14	−5	21
Columbia	−11	13	5	2	12	3	30	9	44	4	52	10	62	11	46	28	34	29	25	21	11	14	0	22
Fayette	−15	13	1	2	8	3	29	9	41	4	52	6	63	10†	48	28	34	29	23	21	8	14	−5	21
Fulton	−10	13	3	7	4	4	29	9	40	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hannibal	−13	13	1	7	10	3	28	6	43	1	51	7	62	11	48	28	35	29	24	21	12	14	−6	21
Jefferson City	−10	13	5	2	10	4	29	9	44	1†	52	9†	63	10	48	28	34	29	25	21	11	14	−1	22
Louisiana	−10	13	−5	8	7	4	28	6	38	2†	52	10†	57	10	44	28	31	29	24	21	13	15	−4	15†
Macon	−15	13†	0	2†	7	3†	25	6	38	2†	50	7	58	10	48	28	33	29†	23	21†	9	14†	−8	21†
Mexico	−12	13†	2	8	9	4	28	6†	40	18	51	6†	58	10	45	28	33	29	24	21	10	14	−3	22
Oakfield	−7	13	6	1†	9	4	28	9	41	16	51	8	62	10	48	28	35	29	26	21	11	14	−4	22
Palmyra	−14	13	0	7†	9	3†	25	6	38	2†	51	9	58	10	47	28	33	29	23	21†	10	14	−8	21†
St. Catharine	−17	13	−2	2	7	3	25	6†	39	4	49	9	59	10	47	28	31	29	21	21	7	14	−10	21†
St. Charles	−6	13	4	8	8	4	29	9	44	21	50	17	62	10	50	28	35	29	27	21	12	14†	−2	22
St. Louis (1)	−4	13	7	7	15	4	30	6	45	3	55	7	66	10	55	28	41	29	30	21	15	14	2	15
St. Louis (2)	−5	13	8	2†	14	3	30	6	45	3	55	7†	66	10	53	28	39	29	29	21	15	14	2	15†
Steffenville	−14	13	0	2†	8	3	24	6	38	18	51	7	56	10	49	28	30	29	21	21	10	14	−9	21†
Unionville	−20	13†	−10	2	3	4	20	6	33	18	45	19	54	10	46	28	31	29	20	21	3	14	−15	21
Warrenton	−10	13	3	8	7	4	29	6†	42	2	52	9	61	10	50	28	34	29	24	21	11	14†	−1	15†
Southeast Lowlands.																								
Cardwell	9	13	18	2†	23	1	33	10	45	4	51	9	64	23	51	31	33	30	28	22	15	15	....	....
Caruthersville	10	17	18	3	24	4†	32	9	46	1	51	8	70	4†	58	30	41	29	31	21	16	15	3	15
Doniphan	4	13	12	3	19	4	32	9	40	17	48	9	62	23	54	28	34	30	28	21	15	15	−3	15†
Jackson	4	13†	12	3†	17	4	29	9	39	17	51	4†	60	23	49	29	34	19†	28	21†	12	15	−23	15
Marble Hill	3	13†	3	2	15	4	25	2	43	19	50	10	60	21†	52	29†	35	30	29	21	11	15	−10	15
Poplar Bluff	4	13	13	3	20	4†	32	9	40	17	49	9	64	23	53	29†	35	30	26	21	15	15†	−17	15
Sikeston	6	14†	14	3	22	2†	31	9	46	17	53	4	64	5†	51	29†	37	30	30	21	19	14	4	15
Cairo, Ill.	6	17	16	2	22	4	34	8	49	3	57	8	68	5	59	29	43	29	34	21	19	15	3	15
Ozark Plateau.																								
Birchtree	−3	13	10	1†	15	4	29	9	40	4†	47	9	60	23	51	29	32	30	26	21	13	14†	−8	15
Bolivar	−8	13	5	2	11	3	27	9	41	4	50	9	60	6†	48	28	32	29	25	21	9	14	−8	22
Cassville	−6	12	....	....	....	....	30	8	35	4	44	9	55	11†	48	24	33	29	24	21	12	14	−29	15
Crocker	−10	16	3	1	20	8	30	8	41	1	51	4	60	24	45	28	30	29	28	20	10	14	−8	20
Dean	−6	13	6	2	14	3	31	8	37	16	45	8†	55	6	50	24	34	29	22	21	8	14	−20	22
Eldon	−12	13	4	2	9	4	28	6†	40	3	49	7	59	5†	41	28	30	29	23	20	9	14	−5	15†
Fruit City	2	13	13	2	20	3†	30	9	45	2†	51	7†	....	....	....	....	....	....	32	20	16	15	−9	21
Gano	−7	13	6	1†	14	4	28	9	42	4†	50	9†	60	11†	49	28	34	29†	22	21	9	14†	−10	22
Goodland	1	14†	7	3	9	4	29	9	35	17†	44	10	55	6	48	30	30	30	26	21†	8	15	−18	22
Hollister	0	13	10	2†	24	3	30	9	40	4	52	15	58	4†	50	24	42	16	30	20	14	14†	−6	22
Houston	−4	13	7	2	17	4	28	9	40	4	50	10	59	23	51	24†	35	29	25	21	10	14	−13	22
Ironton	−2	13	8	3	9	4	29	9	35	17	45	10	54	6	47	29	28	19	23	26	9	15	−15	15
Koshkonong	1	13	11	2	20	4	31	9	43	4	52	8†	64	23	55	29	38	29†	26	21	14	14	−2	15†
Lebanon	−8	13	4	2†	15	4	24	9	42	1†	50	9	57	10	45	28	30	29†	23	21†	9	14†	−11	22
Lockwood	−9	13	6	2†	10	3	28	9	44	4†	51	9	59	7	50	28	31	29	25	21	9	14	−8	15
Mountain Grove	−5	13	5	2†	16	4	26	9	41	4	50	7†	58	10†	51	28	34	29	24	21	10	14†	−8	22
Mount Vernon	−7	15	6	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Neosho	−7	13	8	2	13	3	26	9	39	16	46	9	56	11	51	29	30	29	23	21	11	14	−18	22
Rolla	−7	13†	4	1†	9	4	28	9	41	16	51	9	62	6†	48	28	33	29†	23	21	8	14†	−6	22
Springfield	−8	13	5	2	11	3	28	9	42	3	53	7	63	6	52	28	35	29	27	21	11	14	−6	22
Southwest Plain.																								
Amoret	−14	13	2	2	3	3	26	9	37	3	48	7†	61	6†	45	28	29	29	24	21	7	14	−8	15
Appleton City	....	....	....	....	....	....	....	....	....	....	....	....	....	....	51	28	33	29	24	21	10	14	−7	15
Clinton	−4	13	5	2	12	3	28	9	42	3†	52	7†	52	6	49	28	33	29	26	20	10	14	−9	22
Harrisonville	−14	13†	5	1†	5	2†	32	7†	41	4	48	7	60	11	45	28†	30	29	24	21†	8	14	−7	22
Lamar	−9	13†	6	6	9	3†	27	9	41	16	51	9	60	11†	51	28†	29	29	24	21	10	14	−9	15
Lamonte	−13	13	3	6	6	3	28	9	41	11	50	8	62	21†	43	29	29	29	23	21	....	....	−6	22
Marshall	−14	13	2	2	8	3	28	9	39	4	42	8	60	10	48	28	31	29	21	21	7	14	−3	21†
Nevada	−9	13	5	2	6	3	28	9	41	3	49	9	60	11	47	28	30	29	24	21	10	14	−3	15
Warrensburg	−14	13	3	2	7	3	29	9	41	3	48	8	62	6†	55	23	33	29	25	21	10	14	−2	15†
Warsaw	−10	13	6	2	9	4	31	8†	38	4	49	9	56	11	46	29	30	29	21	21	9	14	−9	15
Northwest Plateau.																								
Avalon	−13	13	0	2	6	3	28	6†	42	4†	....	....	62	10	51	28	35	29	27	20†	14	14†	−8	21
Bethany	−20	13	−12	2	4	3	22	4	35	2†	46	7	56	21	44	28	27	29	22	21	5	14	−15	21
Conception	−24	13	−8	2	0	3	23	6	37	2	48	7	57	15	52	27	33	29	21	20	5	14	−16	21
Grant City	−21	13	−9	2	1	3	23	6	37	19	47	7	61	21	50	28†	30	29	22	21	4	14	−16	21
Kansas City	−14	13	2	2	6	3	30	7	42	3	52	6	67	5	55	28	39	29	26	20	13	14	−3	21
Kidder	−20	13	−4	2	8	3	25	9	38	1†	48	7†	60	7†	51	27	32	29†	24	21	8	14†	−11	21
Lexington	−15	13	1	2	7	3	28	9	39	3	49	7	60	11	48	28†	32	29	26	21	10	14	−4	21
Liberty	−16	13	0	2	4	3	26	9	39	3	50	8	61	21	48	28	32	29	23	21	8	14	0	20†
Maryville	−22	13†	−10	2†	−2	3†	22	9	35	18	48	3†	59	21	47	28	28	29	20	21	4	14	−17	22
Oregon	−21	13	−7	2	0	3	23	9	38	1	42	9	59	21	50	27†	30	29	20	20	7	14	−14	21
St. Joseph	−19	13	−4	2	4	3	28	9	40	3	51	8	61	21	50	28	33	29	24	20	12	14	−9	21
Tarkio	−22	13	−9	2	−2	3	21	9	36	18	46	7	57	21	47	28	29	29	20	20	6	14	−16	21
Trenton	−18	13	−6	2	7	3	27	6	37	3	50	7	62	7†	52	27	33	29	24	21	9	14	−12	21

† also on other dates.

Monthly and Annual Precipitation of each Section for the Year 1916, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain	6.63	+4.60	1.07	−1.34	2.27	−0.70	2.45	−1.29	6.72	+2.33	4.85	+0.35	1.13	−2.99	6.68	+3.73	2.56	−1.17	2.46	−0.08	2.22	−0.04	1.12	−0.75	40.44	+2.93
Southeast Lowlands	9.27	+5.15	1.38	−2.21	2.06	−2.52	2.98	−1.45	3.40	−0.84	8.29	+4.11	1.83	−2.33	2.47	−0.59	2.51	−0.61	2.18	−0.51	2.29	−1.21	4.92	+1.16	43.10	−2.62
Ozark Plateau	9.90	+7.56	0.98	−1.69	2.04	−1.77	4.10	−0.25	4.27	−0.47	5.37	+0.54	1.16	−3.32	2.79	−0.80	3.31	−0.51	1.37	−1.48	2.84	+0.15	2.71	+0.35	41.12	−4.63
Southwest Plain	6.85	+5.41	0.76	−1.16	4.31	+1.88	3.64	−0.12	5.94	+0.69	7.25	+2.31	0.71	−3.69	2.66	−1.27	3.31	−0.66	2.39	−0.40	2.62	+0.51	1.00	−1.00	41.44	−2.19
Northwest Plateau	3.77	+2.55	0.65	−0.97	2.67	+0.59	3.05	−0.29	7.38	+2.00	5.37	+0.52	1.49	−3.26	3.90	−0.27	3.04	−1.19	2.61	−0.11	2.46	+0.84	0.46	−0.98	36.45	0.38
State	7.36	+5.16	0.98	−1.48	2.53	−0.65	3.23	−0.6	5.61	+0.89	6.99	+1.17	1.25	−3.15	4.05	+0.49	2.94	−0.86	2.17	−0.54	2.49	+0.14	1.85	−0.29	40.80	−1.38

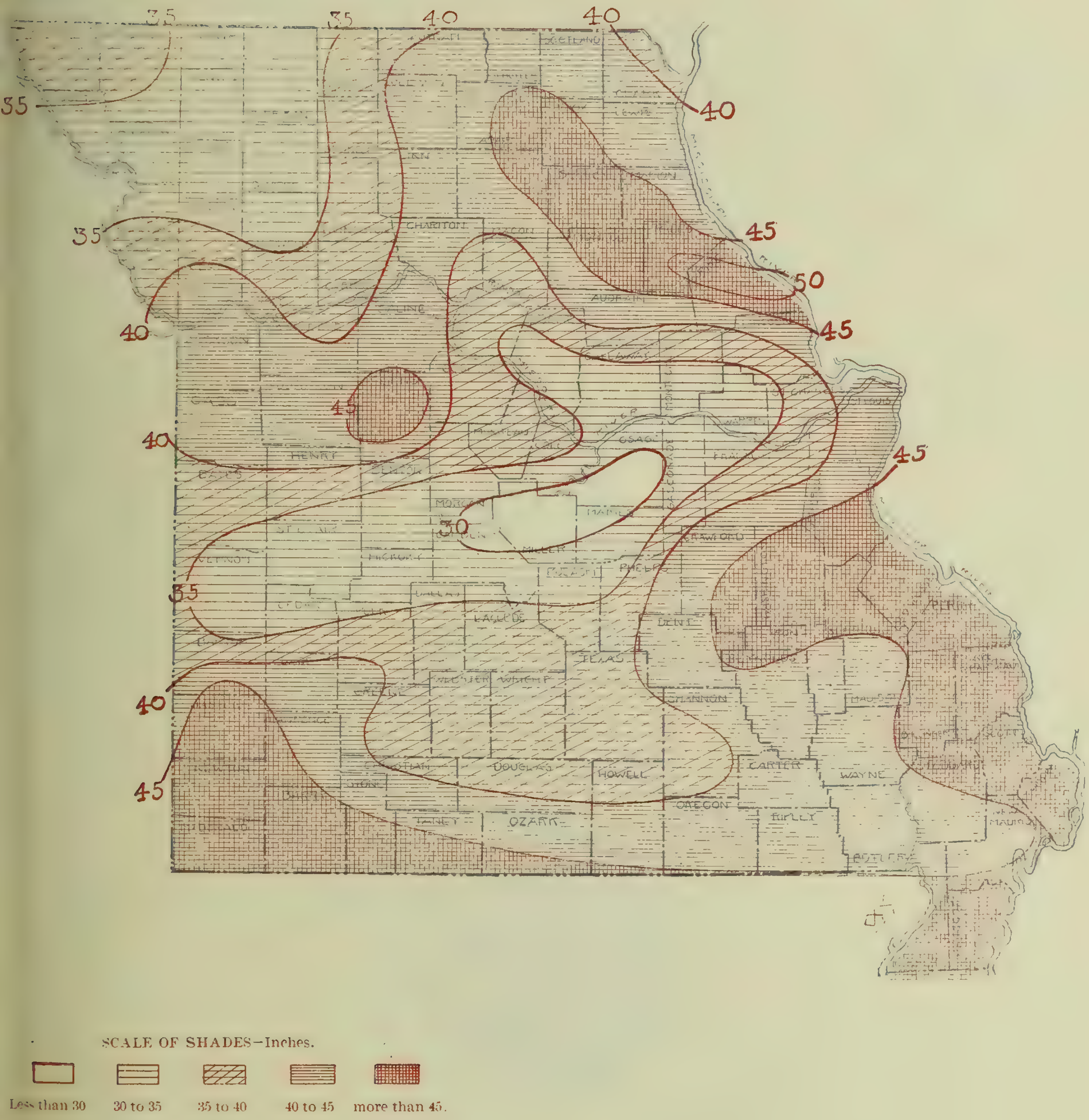
OBSERVATION STATIONS.



COOPERATIVE OBSERVERS.

Stations.	Name.	Stations.	Name.	Stations.	Name.
Amoret	Darby Fruit Farm.	Goodland	F. M. Adams.	Mount Vernon	J. R. White & Son.
Appleton City	W. G. Bigelow.	Gorin	J. W. Pulliam.	Neosho	W. O. Buck.
Arlington	G. V. Randolph.	Grant City	W. H. Campbell.	Nevada	Mrs. C. Jewell.
Avalon	F. G. Ashbaugh.	Hannibal	U. S. Weather Bureau.	New Madrid	Miss Josie Smith.
Bethany	M. H. Moulton.	Harrisonville	A. J. Sharp.	Oakfield	E. E. Steines.
Birchtree	V. H. Kirkendall.	Hermann	C. T. Maushund.	Oregon	Tom Curry.
Bolivar	A. C. Fink.	Hollister	W. P. Chapmann.	Pacific	Wm. Dreher.
Boonville	C. Randecker.	Houston	R. F. Harmon.	Palmyra	W. B. Markell.
Brunswick	Louis Benecke.	Ironton	W. H. Delano.	Patton (near)	George F. Ellis.
Cape Girardeau	D. L. Albert.	Jackson	L. M. Bean.	Poplar Bluff	Miss Belle Kinne.
Cardwell	F. E. Tate.	Jefferson City	Miss Emma Swift.	Rolla	Prof. Elmo G. Harris.
Caruthersville	H. E. Averill.	Kansas City	U. S. Weather Bureau.	St. Catherine	L. D. Baker.
Cassville	Mrs. Zuma Bloomer.	Keytesville	J. T. Dewey, M. D.	St. Charles	L. C. Saeger.
Clifton Hill	L. S. Harlan.	Kidder	J. F. Sharp.	St. Joseph	U. S. Weather Bureau.
Chillicothe	Hocey O. Dupy.	Koshkonong	R. M. Hitt.	St. Louis (1)	U. S. Weather Bureau.
Clinton	A. E. Derwent, M. D.	Lamar	Dick B. Houston.	St. Louis (2)	St. Louis University.
Columbia	U. S. Weather Bureau.	Lamonte	J. Ed. Hall.	Sikeston	W. E. Burnham.
Conception	Fr. Adelhelm Hess.	Lebanon	Leonard E. Dickerson.	Springfield	U. S. Weather Bureau.
Crocker	Roy W. Reed.	Lexington	J. W. Keithley.	Steelville	Thomas D. Slater.
Dean	H. E. Dean.	Liberty	W. C. Wilmott.	Steffenville	Frank Hall.
Doniphan	W. W. Martin.	Lockwood	C. S. Crow.	Tarkio	John F. Frazier.
Eldon	E. H. Shepherd.	Louisiana	J. T. Farrell.	Trenton	W. H. Estes.
Fayette	Prof. T. B. Smith.	Macon	John A. Cook.	Union	J. Wm. Keller.
Fruit City	R. C. Walton.	Marble Hill	Dr. A. F. Hendricks.	Unionville	Geo. W. Davis.
Fulton	Dr. O. M. Weigle.	Marshall	Prof. W. H. Black.	Valley Park	H. J. Lucksinger.
Gallatin	Robert R. Wynne, Jr.	Maryville	J. R. Brink.	Warrenton	Prof. J. H. Frick.
Gano	A. C. Leach.	Mexico	J. F. Llewellyn.	Warrensburg	Geo. H. Collins.
Glencoe	Vint R. Neel.	Mountain Grove	Mo. Fruit Exp. Sta.	Warsaw	J. R. Smith, M. D.
				Waverly	John W. Cauthorn

TOTAL PRECIPITATION FOR THE YEAR 1916.



U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

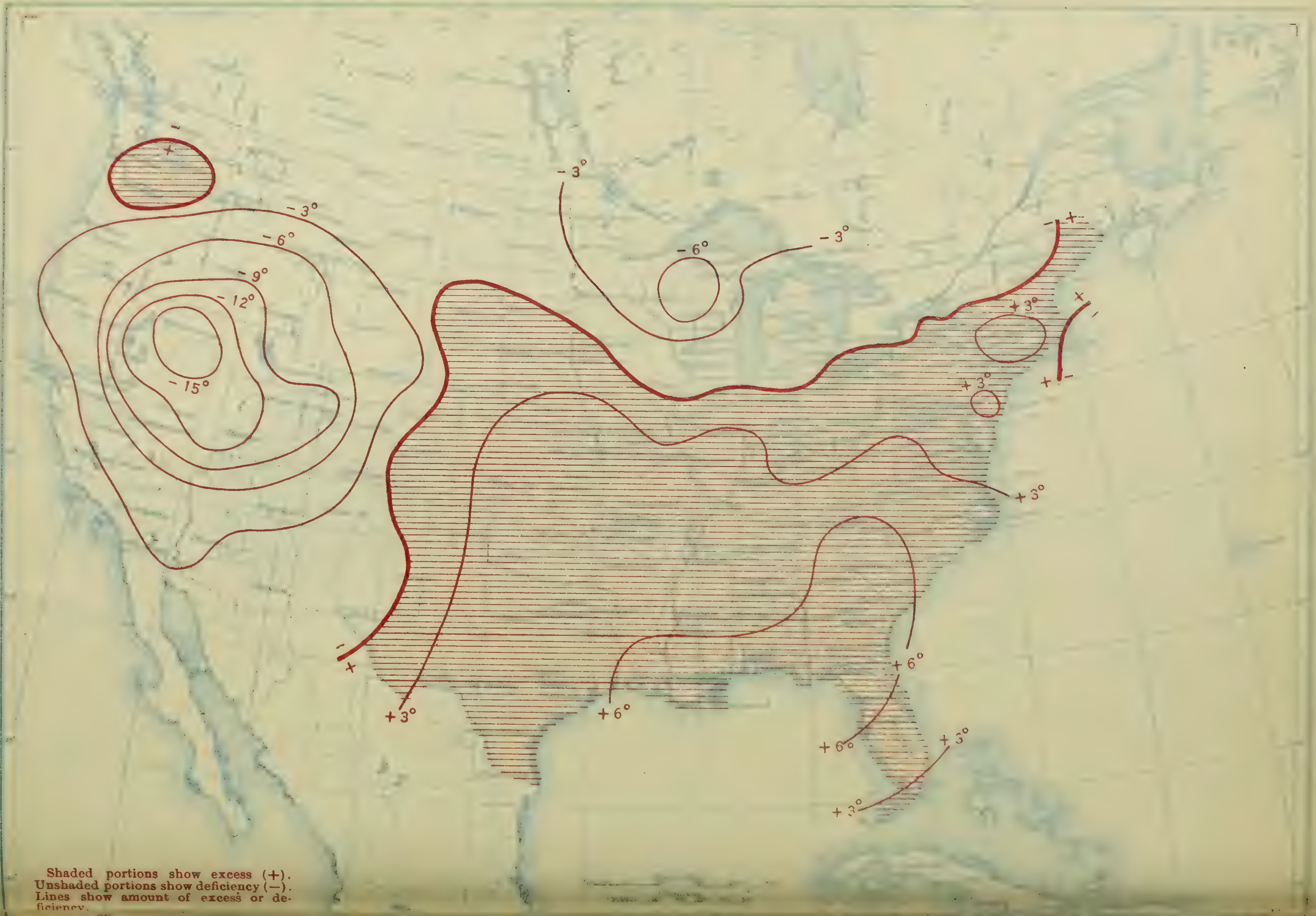
JANUARY, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
FEBRUARY 20, 1917.

Departure of the Mean Temperature from the Normal, January, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXI. Columbia, Mo., January, 1917. No. 1.

GENERAL SUMMARY.

nuary, 1917, in Missouri, was as a rule bright, dry, and , notwithstanding the fact that three cold waves swept the State, the first coming about the 10th, the second t the 21st, and the third during the latter part of the 31st. highest temperatures, ranging from about 60° to 75°, oc-d on the 21st, 28th, 29th, 30th, and 31st, and, curious as ay seem, on days of or immediately preceding the cold s. The lowest temperatures were recorded on the 14th, 31st, zero or lower occurring at several stations. The min-n for the month, 10° below zero, occurred on the 14th, at son, in the southeastern part of the State, which in itself ther unusual.

e monthly precipitation was unevenly distributed; and less than the average in all divisions, save the southeastern nds. Some stations in that division, and a few in the k plateau, received amounts in excess of 4 inches, but the er part of the State received less than 1 inch. The west-alf of the State got about 40 per cent of the normal amount, e the eastern half received about 86 per cent, much the ter part, though, falling, as already mentioned, in the heastern division. The snowfall was unusually light, the thly fall for the State as a whole being only about 50 per of the normal amount.

ving to the scarcity of precipation a great deal of fall and er plowing has been done. At the close of the month t was in fair condition, the absence of ice covered ground ng the month being in its favor. It was not making much th, however; and any prolonged unfavorable weather ld catch the plants at a disadvantage. Moisture, particul- heavy snow, is needed. Fruit has not been seriously in-l, though the low December temperatures damaged some hes in the Ozarks. Stock is standing the winter well. pt during periods of lowest temperatures, building and r outdoor work made progress.

TEMPERATURE.

e monthly mean temperature, 68 stations reporting, was . The mean departure from the normal for 57 having 10 ore years' record was plus 2.5°. The temperature excess quite uniformly distributed, the differences between the hern and southern division being about 0.6°. The average ber of winter days (days on which the maximum tem-ture did not rise above 32°) was 6; minimum temperatures 32° or lower on 25 days, and zero or lower, at a few sta-, on 2 days.

PRECIPITATION.

he average precipitation, 82 stations reporting, was 1.52 es, nearly 6 inches less than fell during the same month in . The departure from the normal for 70 stations having r more years' record was minus 0.64 inch. Unsettled con-ns prevailed with light rains during the first 5 days over western half of State, but quite heavy amounts fell over the ern half; light precipitation was more or less general from 15th to the 17th, on the 21st, and again on the 29th, the being heavier in the southeastern lowlands and Ozark pla- than elsewhere. The greatest local monthly precipitation 5.54 inches, at Caruthersville, and the least was 0.20 inch, at Marshall. The greatest amount recorded in any 24 consecutive hours was 2.50 inches, at Ironton on the 4–5th.

The average snowfall was 2.3 inches, which is about 50 per cent of the normal. There was very little sleet.

The average number of days with 0.01 inch or more precipitation was 5.

WIND.

The prevailing winds were from the southwest. The total number of miles and hourly velocities, as recorded at 8 stations with anemometers, were somewhat above normal. Quite strong winds obtained on several days, particularly on the 4th, 10th, and 21st.

SUNSHINE AND CLOUDINESS.

For a mid-winter month, the weather was unusually bright. The average number of hours of sunshine, 5 regular stations reporting, was 196, which is about 65 per cent of the possible, and 14 per cent greater than the normal.

MISCELLANEOUS PHENOMENA.

Fogs—January 1, 2, and 4. *Halos, solar*—January 3, 9, 13, 18, 19, 20, 21, 22, 23, 24, and 27. *Halos, lunar*—January 3, 6, 9, 12, and 16. *Sleet*—January 17, 24, and 31. *Thunderstorms*—January 2, 3, and 4.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
								Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	30.07	81	......	184	61	7,004	9.4	39	w.	21
Hannibal	30.07	78	......	......	......	7,498	10.1	43	sw.	21
Kansas City	30.03	74	60	202	67	9,223	12.4	51	nw.	10
St. Joseph	30.08	82	63	200	67	7,202	9.7	46	nw.	21
St. Louis	30.06	80	69	205	68	10,778	14.5	46	nw.	21
Springfield	30.08	81	63	161	52	8,750	11.8	46	w.	21
Cairo, Ill	30.08	79	72	......	......	7,419	10.0	40	s.	4
Keokuk, Iowa	30.08	79	70	224	74	6,457	8.6	40	w.	21

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	21.5	−8.7	74	−32	1.91	−0.08	.....	.....	6	....	....	....
1889	31.8	+1.6	69	− 2	2.36	+0.37	.....	.....	6	....	....	....
1890	33.8	+3.6	81	−19	4.25	+2.26	.....	.....	9	....	....	....
1891	34.1	+3.9	74	− 1	1.52	−0.47	.....	4.3	6	....	....	....
1892	24.0	−6.2	67	−25	1.80	−0.19	.....	.....	4	14	8	9
1893	22.5	−7.7	56	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+1.2	77	−35	2.21	+0.22	2.96	2.7	5	13	9	9
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+2.7	71	− 9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+4.3	77	− 9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	0.8	4	17	7	7
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+5.4	76	− 8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+4.1	79	− 5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+4.2	68	−10	1.51	−0.48	2.13	3.6	5	19	5	7
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+6.9	78	− 1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18
1917	32.9	+2.5	76	−10	1.51	−0.64	2.50	2.3	5	15	7	9

Climatological data for January, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	621	39	.....	.....	.....	.....	.....	.....	.....	0.59	−1.41	0.30	1.4	6	22	3	6	nw.	C. Randecker.
Brunswick	Chariton	652	36	29.6	+2.9	64	28	3	14	46	0.71	−0.95	0.48	2.2	4	17	3	11	nw.	Louis Benecke.
Clifton Hill	Randolph	731	.....	31.5	+2.6	64	28	2	14	44	0.57	.....	0.54	T.	3	19	7	5	.....	L. S. Harlan.
Columbia	Boone	784	26	31.0	+3.8	66	28	3	31	44	1.05	−1.18	0.35	2.3	8	11	12	8	sw.	U. S. Weather Bureau.
Fayette	Howard	725	31	28.9	+1.2	66	28	0	14†	48	0.54	−1.43	0.45	0.5	3	.....	.....	.....	.....	Prof. T. B. Smith.
Fulton	Callaway	818	24	32.0	+2.2	65	28	2	14†	44	1.67	−0.80	1.02	2.2	8	22	2	7	sw.	Dr. O. M. Weigle.
Glencoe	St. Louis	479	.....	.....	.....	.....	.....	.....	.....	.....	1.67	.....	1.00	4.0	4	18	5	8	n.	Vint R. Neel.
Gorin	Scotland	700	27	.....	.....	.....	.....	.....	.....	.....	0.45	−1.18	0.42	T.	2	10	13	8	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	28.7	+2.0	62	28	4	16	44	0.88	−1.32	0.54	0.8	8	14	11	6	sw.	U. S. Weather Bureau.
Hermann	Gasconade	519	42	.....	.....	.....	.....	.....	.....	.....	1.20	−1.03	0.66	5.0	10	13	7	11	e.	C. T. Maushund.
Jefferson City	Cole	628	30	32.0	+1.8	65	28	3	16	42	1.76	−0.33	0.70	7.6	8	21	4	6	w.	Miss Emma Swift.
Keytesville	Chariton	660	3	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.48	1.2	5	.....	.....	.....	.....	J. T. Dewey, M. D.
Louisiana	Pike	500	38	31.2	+3.3	62	29	2	14	45	2.13	+0.23	0.65	1.4	9	16	11	4	sw.	J. T. Farrell.
Macon	Macon	881	18	27.2	−1.6	64	28	0	14†	52	0.54	−1.12	0.49	T.	2	16	9	6	sw.	John A. Cook.
Mexico	Audrain	797	38	30.4	+1.8	65	28	3	14	46	1.25	−0.82	0.47	2.8	7	19	0	12	w.	J. F. Llewellyn.
Oakfield. ‡‡	Franklin	793	24	35.0	+2.9	66	21	4	14	43	1.80	−0.60	1.23	3.0	5	8	16	7	s.	E. E. Steines.
Pacific	Franklin	467	.....	.....	.....	.....	.....	.....	.....	.....	1.76	.....	1.00	1.0	5	18	3	10	nw.	Wm. Dreher.
Palmyra	Marion	652	4	26.6	−1.8	61	28	0	14	52	0.91	−1.39	0.58	2.0	3	18	5	8	nw.	W. B. Markell.
St. Catherine	Linn	914	3	27.6	.....	60	28†	0	14	34	0.48	.....	0.37	0.5	3	15	11	5	sw.	L. D. Baker.
St. Charles	St. Charles	614	38	33.9	+2.7	66	21	3	16	40	1.26	−1.09	1.04	4.0	3	9	12	10	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	34.8	+3.8	65	21	11	14	50	1.72	−0.55	0.93	2.5	8	9	13	9	nw.	U. S. Weather Bureau.
St. Louis (2)	......do	578	4	33.8	.....	65	21	9	11†	47	1.95	.....	1.08	1.8	10	9	11	11	nw.	St. Louis University.
Steffenville	Lewis	576	23	29.4	+1.0	62	29	−2	13	40	0.58	−1.65	0.50	0.5	3	14	11	6	w.	Frank Hall.
Union	Franklin	568	.....	.....	.....	.....	.....	.....	.....	.....	1.57	.....	1.03	4.0	8	11	10	10	se.	J. Wm. Keller.
Unionville	Putnam	1,072	23	23.7	+0.4	60	28	−8	14	46	0.85	−1.17	0.36	0.5	5	22	3	6	n.	Geo. W. Davis.
Valley Park	St. Louis	430	.....	.....	.....	.....	.....	.....	.....	.....	2.06	.....	1.02	3.3	7	16	4	11	w.	J. H. Lucksinger.
Warrenton	Warren	865	25	30.2	+1.0	64	21	2	16†	38	1.44	−1.02	0.63	2.5	7	8	15	8	nw.	Prof. J. H. Frick.
Section means and extremes		.....	.....	29.9	+1.9	66	21†	−8	14	52	1.19	−0.79	1.23	2.1	6	15	8	8	nw.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	.....	.....	.....	.....	.....	.....	.....	3.40	−1.25	1.35	5.0	11	9	4	18	n.	D. L. Albert.
Cardwell	Dunklin	225	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. E. Tate.
Caruthersville	Pemiscott	220	25	43.0	+3.8	73	29†	5	14	31	5.54	+1.04	1.70	6.0	3	9	11	11	s.	H. E. Averill.
Doniphan	Ripley	440	11	40.1	+3.0	74	31	−3	14	40	3.10	−0.87	1.20	4.0	7	13	5	13	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	38.8	+4.5	71	29	−10	14	50	3.02	−0.61	1.55	T.	7	7	10	14	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	38.8^{a}	+4.1	76	31	−9	14	42	3.25	+0.01	1.50	4.0	8	12	12	7	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	.....	.....	.....	.....	.....	.....	.....	4.96	−0.28	1.88	8.5	13	9	2	20	n.	Miss Josie Smith.
Patton (near)	Bollinger	430	1	.....	.....	.....	.....	.....	.....	.....	0.64	.....	0.30	1.0	4	18	0	13	n.	George F. Ellis.
Poplar Bluff	Butler	333	12	37.8	+0.7	75	29	0	14	44	3.06	−0.50	1.32	6.4	8	11	5	15	.....	Miss Belle Kinne.
Sikeston	Scott	328	15	41.0	+3.8	75	31	8	14	33	4.46	−0.01	1.36	6.0	9	12	10	9	s.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	39.2	+4.4	70	31	9	14	43	4.32	+0.50	2.15	6.9	13	6	11	14	n.	U. S. Weather Bureau.
Section means and extremes		.....	.....	39.8	+3.5	76	31	−10	14	50	3.58	+0.22	2.15	4.8	8	11	7	13	s.	
Ozark Plateau.																				
Arlington	Phelps	767	14	.....	.....	.....	.....	.....	.....	.....	1.80	−0.22	1.38	2.0	6	16	4	11	n.	G. V. Randolph.
Birchtree	Shannon	1,200	22	38.1	+3.3	70	29	4	14	42	3.34	+0.62	1.40	2.0	7	18	2	11	s.	V. H. Kirkendall.
Bolivar	Polk	1,020	28	35.2	+0.6	62	29†	8	14†	37	1.34	−0.66	0.46	1.0	5	17	9	5	nw.	A. C. Fink.
Cassville	Barry	1,500	5	37.5	.....	76	30	10	13	63	2.07	.....	0.76	8.0	6	15	2	14	n.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,300	5	38.8^{e}	+7.3	64	26†	1	13	36	.....	.....	.....	.....	.....	25	0	6	.....	Roy W. Reed.
Dean ‡‡	McDonald	1,000	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. E. Dean.
Eldon	Miller	934	15	33.4	+1.2	67	29	0	16	56	1.01	−1.07	0.70	3.0	6	13	13	5	nw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	38.1	.....	69	29†	5	14	41	3.65	+0.83	1.80	3.0	6	21	4	6	s.	R. C. Walton.
Gano ‡‡	Dent	1,250	12	35.9	+1.9	66	29	2	14	45	2.57	−0.35	1.73	1.4	6	12	11	8	s.	A. C. Leach.
Goodland	Iron	1,000	11	35.6	+2.0	68	29	0	14	44	3.35	+0.33	1.60	1.5	5	18	5	8	s.	F. M. Adams.
Hollister	Taney	1,000	7	37.4	+1.1	74	29	8	14	40	1.50	−0.87	1.00	2.0	4	14	0	17	nw.	W. P. Chapmann.
Houston	Texas	1,280	23	38.0	+5.4	67	4†	5	14†	42	1.58	−0.60	0.59	1.0	6	16	2	13	nw.	R. F. Harmon.
Ironton	Iron	925	38	35.4	+3.1	69	29	−2	14	34	4.10	+1.08	2.50	3.5	9	8	10	13	sw.	W. H. Delano.
Koshkonong	Oregon	911	15	40.2	+3.2	73	29	5	14	45	3.11	−0.09	1.15	3.0	8	11	6	14	nw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	36.8^{g}	+3.2	68	29	6	14	41	1.58	−0.83	1.25	1.0	5	20	7	4	s.	Leonard E. Dickerson
Lockwood	Dade	1,088	21	37.2	+3.1	67	28	8	22	46	1.02	−0.42	0.60	2.0	3	15	5	11	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	35.0	+1.0	68	29	6	14	34	4.35	+1.81	2.37	2.0	6	14	5	12	nw.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	34.8^{d}	+0.9	68	30	7	14	47	.....	.....	.....	.....	.....	13^{d}	3^{d}	11^{d}	sw.	J. R. White & Son.
Neosho	Newton	1,083	33	38.4	+3.0	74	30	6	14	48	0.53	−1.81	0.43	1.0	2	15	4	12	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	34.8	+3.3	68	28	5	14	46	1.81	−0.53	1.35	1.5	5	18	9	4	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	36.0	+4.7	65	29	5	31	56	1.46	−1.20	1.23	2.2	7	12	8	11	s.	U. S. Weather Bureau
Steelville	Crawford	755	15	.....	.....	.....	.....	.....	.....	.....	1.75	−0.30	1.25	0.8	5	18	4	9	sw.	Thomas D. Slater.
Section means and extremes		.....	.....	36.7	+2.8	76	30	−2	14	63	2.20	−0.24	2.50	2.2	5	15	6	10	s.	
Southwest Plain.																				
Amoret	Bates	850	7	32.7^{d}	+1.3	68	29	3	22	48	1.01	+0.01	0.41	6.0	3	11	9	11	nw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	30.0	−1.8	70	29	6	16†	46	0.33	−1.96	0.13	0.4	6	8	16	7	sw.	W. G. Bigelow.
Clinton	Henry	800	29	34.9	+3.2	68	28†	6	14	45	0.59	−1.45	0.37	0	2	14	12	5	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	31.9	+4.5	65	29	5	22†	43	0.46	−1.09	0.30	2.0	4	10	3	18	w.	A. J. Sharp.
Lamar	Barton	964	35	35.1	+2.4	72	29	−3	14	42	0.82	−0.91	0.64	0.6	4	15	3	13	sw.	Dick B. Houston.
Lamonte	Pettis	863	27	31.4^{a}	+2.1	67	29	2	16	39	0.46	−1.28	0.42	3.0	3	13	14	4	sw.	J. Ed. Hall.
Marshall	Saline	779	25	31.0^{c}	+3.3	64	28	3	22	37	0.20	−1.61	0.20	2.0	1	19	11	1	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	37.2	+5.9	68	29	7	22	45	1.27	−0.71	0.31	6.0	6	17	5	9	nw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	33.0	+4.1	67	29	4	16	40	0.58	−1.23	0.27	2.8	3	18	5	8	sw.	Geo. H. Collins.
Warsaw	Benton	883	11	34.6	+0.8	70	29	2	14	46	1.34	−0.90	0.43	4.5	8	16	12	3	sw.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.42	0.6	6	18	1	12	sw.	John W. Cauthorn.
Section means and extremes		.....	.....	33.2	+2.9	72	29	−3	14	48	0.70	−1.11	0.64	2.5	4	15	8	8	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	31.6	+3.8	62	28	0	22	40	0.70	−1.04	0.50	1.0	3	22	2	7	sw.	F. G. Ashbaugh.
Bethany	Harrison	881	26	25.4	+0.7	62	3	−8	14	38	0.50	−0.88	0.50	T.	1	17	8	6	sw.	M. H. Moulton.
Chillicothe	Livingston	.....	1	.....	.....	.....	.....	.....	.....	.....	0.48	−1.91	0.42	T.	2	16	4	11	.....	Hocey O. Dupy.
Conception	Nodaway	982	31	26.0	+1.2	60	28	−6	14†	41	0.45	−0.68	0.40	0.5	2	16	9	6	sw.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	.....	.....	.....	.....	.....	.....	.....	0.45	−0.81	0.34	0.5	4	16	9	6	nw.	Robert R. Wynne, Jr.
Grant City	Worth	1,130	23	25.7	+1.1	59	29	−5	14†	40	0.50	−0.44	0.50	T.	1	22	3	6	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	31.0	+4.8	65	28	−3	31	45	0.62	−0.51	0.35	2.8	5	18	6	7	sw.	U. S. Weather Bureau
Kidder	Caldwell	1,017	25	30.9	+4.4	63	28	0	22	30	0.52	−0.81	0.38	1.0	4	20	4	7	sw.	J. F. Sharp.
Lexington	Lafayette	813	34	31.0	+3.5	62	28	4	16†	33	0.71	−0.86	0.40	1.5	5	18	0	13	w.	J. W. Keithley.
Liberty	Clay	864	27	30.0^{f}	+1.2	66	29	2	22	48	0.29	−1.00	0.20	2.9	2	19^{f}	3^{f}	3^{f}	sw.	W. C. Wilmott.
Maryville	Nodaway	1,160	25	23.6	+1.3	58	28	−7	23	45	0.60	−0.51	0.40	2.0	4	20	6	5	n.	J. R. Brink.
Oregon	Holt	1,113	60	26.1	+2.3	56	28	−5	22	43	0.40	−1.07	0.35	0.5	3	17	6	8	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	28.4	.....	63	28	−8	31	45	0.38	−0.70	0.30	0.8	5	13	12	6	nw.	U. S. Weather Bureau
Tarkio	Atchison	1,150	4	25.9^{a}	+3.9	56	28	−5	22	42	0.33	−0.51	0.33	T.	1	23^{a}	1^{a}	6^{a}	sw.	John F. Frazier.
Trenton	Grundy	812	21	27.0	0.0	57	28	0	22	30	0.96	−0.50	0.73	T.	3	18	8	5	n.	W. H. Estes.
Section means and extremes		.....	.....	27.9	+1.9	66	29	−8	14†	48	0.53	−0.76	0.73	0.9	3	18	6	7	sw.	
State means and extremes		.....	..	32.9	+2.5	76	30†	−10	14	63	1.52	−0.64	2.50	2.3	5	15	7	9	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete report used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R No. 1 of Dean, Anderson, of Gano, Salem, R. F. D. No. 5.

Daily precipitation for January, 1917.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
rtheast Plain.																																	
ville	Missouri	.05				.09										.05	T.	.04	T.			.30								.06			0.59
wick	Grand	T.				.12								.03		.08						.48								T.		T.	0.71
n Hill	Chariton	.01	.02												T.			T.				.54											0.57
bia***	Missouri	T.			.32	.03					T.		T.			.10		.07			.30	.01							.21	.01		T.	1.05
te	do										T.					.05		T.				.45							.04				0.54
n.	do		.02	.01	.91	.11										.05		.04				.33								.20			1.67
e ‖	Meramec					1.00										.15	T.					.40								.12			1.67
	Mississippi				.03																	.42										T.	0.45
ibal***	do		T.		.21	.05					.01		T.			T.		.03			.08	.46				T.			.02	.02		T.	0.88
ann ‖	Missouri	.02		.05		.66						.01				.13	.01	.02	.04			.20								.06			1.20
on City ‖	do	.03			.05	.55					T.					.70	.05	.01				.27		T.						.10			1.76
ville	Chariton	.04			.08											.02			.10			.48											0.72
ana	Mississippi	.45			.65	.20					.02			.01		.02		.03				.45								.30			2.13
l ‖	Chariton	.05												T.		T.		T.				.49										T.	0.54
o ‖	Mississippi	.02		.01		.47					T.					.06	T.	.05	T.			.40								.24			1.25
d	Meramec				.52	.71					T.	T.				.08		T.				.33								.16			1.80
	do	.25				1.00	T.									.10	T.					.31								.10			1.76
ra ‖	Mississippi	T.																	.20			.58								.13			0.91
t erine	Grand		T.		T.	.10					T.		T.			.01						.37										T.	0.48
arles	Missouri	T.			T.	1.04					T.					.12						.10											1.26
uis (1)***	Mississippi	T.	.01		.63	.30					T.					.17		T.			.20	.17	T.					T.	.20	.04		T.	1.72
uis (2)	do		.03		.60	.48					.01	T.				.16		.01			.03	.40	T.						.22	.01			1.95
ville	do	T.									T.		T.			T.		.03							.50			T.		.05			0.58
	Meramec	.02		.04		1.03										.11	.01		.02			.30								.04			1.57
ville	Grand	.04		.15		.26								T.		T.			T.			.36	.04										0.85
Park ‖	Meramec	.01		.02		1.02	.14						T.			.11	T.					.57	T.							.19			2.06
nton ‖	Mississippi	.01		.05		.63						T.				.11		T.	.10			.34								.20		T.	1.44
heast Lowlands.																																	
Girardeau ‖‖	Mississippi	.05		.35	.20	1.35	.05							.30	T.	.20						.05	.60						.10	.15			3.40
ell	do																																....
ersville	do		.19	T.	1.70	1.00								.78	.09	.30						.90			T.			T.	T.	.47		.11	5.54
an	Black		T.	.15	.70	1.20							T.	.27		.18						.30						T.	T.	.30			3.10
n	Mississippi	.35	.10		1.55	T.								.10								.38						.04	.50				3.02
e Hill	do	.05		.20		1.50								.30	.10						.20	.70								.20			3.25
Madrid	do		.03	.30	.45	1.88	.21							.35	.20	.24						.14	.60		.01				.10	.45			4.96
(near)	do													.05		.05					.30									.24			0.64
Bluff ‖	Black	T.	T.	.06	.50	1.32								.44	T.	.20			T.			.12	.05						T.	.37			3.06
on	Mississippi	.01		.04	1.36	.63								.83	.11	.21						.96							.31				4.46
Ill.***	do																																....
k Plateau.																																	
ton	Gasconade	.07		.05		1.38										.06						.20								.04			1.80
ree	Black				.20	1.40	.82							.10		.10						.29								.43			3.34
ar	Osage				.40	.46										.10				.18									.20				1.34
lle	White		T.	.36	.76	.07										.18	.10	.60				T.								T.			2.07
er	Gasconade																																
	Neosho																																
	Osage			.06	.70		.14									.02						.08								.01			1.01
ity	Black		T.	.45	.50	1.80								.20		.10													T.	.60			3.65
	Meramec			.82	.80	.72					T.					.05						.06								.12			2.57
and	Black	.05		1.60	1.20											.15														.35			3.35
ter	White			.20	1.00	.10										.20																	1.50
on	Gasconade			.59	.01	.48					T.					.10	T.	.17												.23			1.58
n ‖	Mississippi			.80		2.30	.20					T.		.06		.15	T.	.03				.08	.08	T.						.40			4.10
onong	Black		.02	.39	1.15	.47							T.	.10		.20						.37								.41			3.11
on ‖	Osage			.08		1.25						T.		T.			.10					.10								.05			1.58
ood	do				.60	.30										.12																	1.02
tain Grove ‖	White	.08		1.22		2.37										.16							.18							.34			4.35
o	Neosho		T.		.43						T.					.10		T.				T.	T.									T.	0.53
‖	Meramec	.02		.15		1.35						T.				.24		T.												.05			1.81
eld***	White		.02		.76	.47					T.			T.	.04	.08		.01					T.						.08			T.	1.46
lle ‖	Meramec	.04		.14		1.25										T.	T.					.15								.17			1.75
hwest Plain.																																	
t	Osage		T.								T.					.40		.20				.41											1.01
ton City	do	T.	T.	T.	.02	.07					T.					.05		.04				.13							.02				0.33
n	do				.22																	.37											0.59
onville ‖	do	.05														.06		.05				.30											0.46
r ‖	Neosho	.06				.64											.06					.06											0.82
nte	Missouri									T.						.02			.02			.42										T.	0.46
all	do										T					.20																T.	0.20
la	Osage				.15	.20										.30		.30				.31								.01			1.27
nsburg	Missouri										T.					.23		.08				.27										T.	0.58
w	Osage	.06	T.	.07	.14	.43					T.	T.				.35		.05				.18	T.							.06		T.	1.34
ly ‖	Missouri	.07				.04					T.					.06	.04	.05				.42											0.68
hwest Plateau.																																	
n	Grand				.14													.06				.50											0.70
ny	do		T.		T.						T.											.50										T.	0.50
cothe ‖	do	.06				T.										T.	T.					.42											0.48
ption	Missouri												.05									.40										T.	0.45
n	Grand		T.		.05	.01					T.		T.	T.		.05		T.				.34								T.		T.	0.45
City	do		T.														T.	T.				.50											0.50
as City***	Missouri				.06											.11		.10			.30	.05											0.62
r	Grand	.06					.03									.05						.38											0.52
gton	Missouri	.03				.13										.09		.06				.40											0.71
ty	do												T.			.09		.20															0.29
ville	do	.10										T.		.05			.05					.40	T.									T.	0.60
	do												.01			.04		T.				.35										T.	0.40
sep***	Missouri		.01		T								.01			.06		T.			.19	.11										T.	0.38
	do		T.										T.									.33										T.	0.33
on	Grand				.17						T.		T.			.06					.73								T.			T.	0.96

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. egular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded.

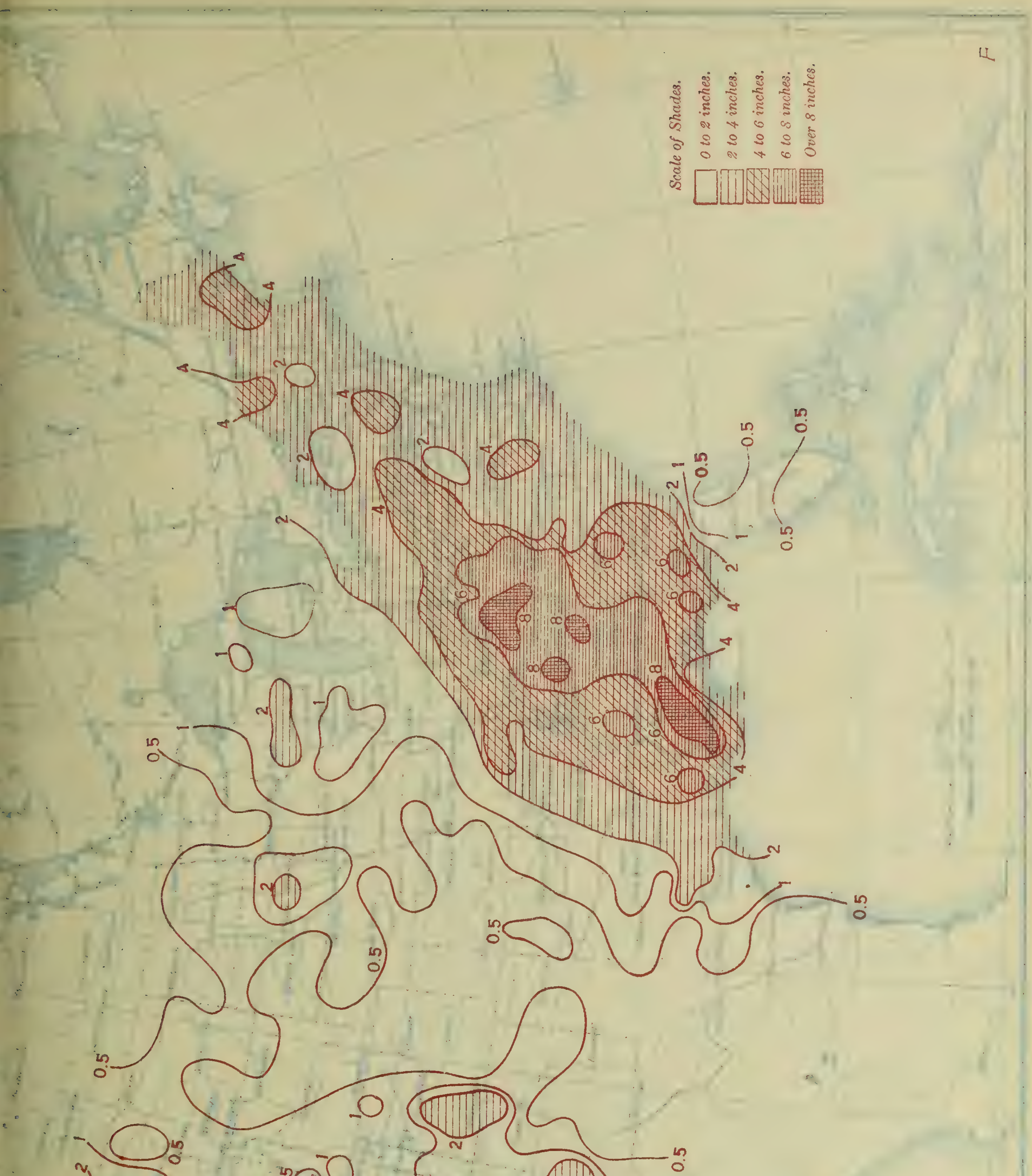
Daily temperatures for January, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	45	45	44	40	45	55	40	54	59	41	25	20	18	35	27	24	28	33	42	50	58	39	35	35	45	42	47	64	63	51	34
	Minimum	21	25	29	29	28	26	29	24	24	24	9	9	7	3	11	5	7	19	12	17	20	5	5	13	20	15	17	18	32	20	27
Columbia	Maximum	43	50	49	50	42	56	40	54	57	52	22	37	16	30	23	22	30	30	40	40	60	17	36	34	45	41	42	66	61	51	47
	Minimum	28	27	30	36	30	32	32	34	33	15	9	13	7	6	12	5	20	17	14	22	17	7	10	21	21	16	26	34	35	29	3
Fayette	Maximum	33	43	43	45	43	56	39	52	59	47	24	33	15	30	22	22	25	32	39	40	58	15	33	34	44	40	43	66	62	51	40
	Minimum	17	30	30	33	26	26	29	29	33	10	6	8	2	0	9	2	19	17	12	20	10	3	7	19	18	14	16	30	45	25	0
Hannibal	Maximum	46	41	41	44	41	54	39	51	56	48	19	34	15	28	23	22	28	30	39	40	61	19	34	31	40	30	37	62	61	48	49
	Minimum	32	26	31	35	29	28	26	29	34	12	5	10	6	5	8	4	18	18	16	22	17	7	12	21	14	9	14	24	32	27	4
Jefferson City §§	Maximum	49	55	45	51	42	59	42	55	58	42	30	41	18	30	23	22	30	29	40	50	63	36	37	36	47	42	43	65	60	54	39
	Minimum	28	27	30	30	31	30	32	33	33	35	9	12	10	5	15	3	4	15	11	18	28	8	9	12	19	18	20	25	37	28	30
Macon §§	Maximum	44	42	43	37	41	54	37	51	53	38	22	30	15	33	25	22	26	31	42	49	58	18	33	32	42	34	44	64	60	49	32
	Minimum	14	23	27	27	27	26	27	25	27	32	5	5	4	0	0	2	2	16	14	15	20	5	5	9	18	9	11	12	32	23	23
Mexico §§	Maximum	48	42	46	41	43	55	38	52	55	41	25	37	18	31	22	24	29	32	38	42	60	20	35	34	44	38	40	65	62	49	45
	Minimum	34	24	28	29	32	28	30	30	33	37	7	7	13	3	4	4	4	21	13	23	23	13	9	19	21	13	14	19	42	26	34
Oakfield	Maximum	54	53	53	58	47	57	51	61	60	55	24	43	37	30	23	25	30	35	35	48	66	37	40	40	48	40	50	60	60	53	64
	Minimum	35	30	30	33	34	28	33	31	35	24	8	15	8	4	15	8	15	24	14	28	35	10	10	27	25	16	32	31	48	28	21
St. Catharine	Maximum	43	39	40	37	39	51	45	50	49	49	21	27	17	30	26	23	26	30	40	38	56	26	33	32	40	33	40	60	60	47	43
	Minimum	26	24	26	31	25	25	24	23	23	20	4	14	2	0	10	1	15	16	12	16	25	3	6	15	16	10	12	28	40	23	9
St. Louis (1)	Maximum	52	51	51	55	45	51	50	59	56	54	22	39	22	26	23	26	31	34	35	44	65	25	38	40	45	40	46	52	60	51	61
	Minimum	39	38	33	38	36	33	35	35	39	20	12	20	11	11	16	12	19	25	20	32	25	14	19	29	23	17	36	29	41	32	11
Unionville §§	Maximum	40	38	41	37	38	46	34	50	51	36	22	26	12	28	26	20	25	28	40	38	52	16	31	32	31	36	40	60	50	58	32
	Minimum	15	24	26	26	22	22	26	24	25	30	3	4	−2	−8	−5	−3	0	8	12	14	15	0	1	4	6	7	10	14	29	18	20
Warrenton §§	Maximum	59	51	46	50	42	55	40	54	56	40	25	41	17	27	21	22	29	29	36	45	64	20	37	36	44	38	40	60	60	49	55
	Minimum	20	28	29	30	31	27	28	31	34	35	7	7	8	3	5	2	2	18	12	11	26	9	10	10	21	13	14	23	34	27	27
Southeast Lowlands.																																
Cardwell	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Caruthersville	Maximum	57	57	67	69	59	57	59	66	64	51	44	41	41	27	22	32	34	45	40	50	64	59	43	42	48	58	55	60	73	72	73
	Minimum	48	38	52	54	42	30	38	37	41	41	20	22	16	5	15	18	22	30	24	34	40	28	22	33	26	29	36	38	54	46	54
Doniphan	Maximum	52	47	61	67	65	55	55	62	63	55	41	40	35	24	23	29	33	45	39	49	63	62	38	47	49	54	58	54	69	64	74
	Minimum	42	34	44	50	40	26	38	34	38	40	17	23	16	3	15	19	22	28	20	29	39	22	17	28	21	24	36	29	53	35	39
Jackson	Maximum	58	51	60	63	65	58	51	59	63	58	51	51	45	40	40	40	45	43	40	50	62	53	36	42	44	45	52	53	71	62	65
	Minimum	36	28	38	40	35	25	31	35	31	36	14	19	12	0	15	18	18	28	10	25	35	20	12	24	21	24	30	28	44	33	25
Marble Hill	Maximum	60	62	60	62	62	55	50	62	60	57	39	39	32	25	23	25	....	40	35	46	62	62	40	45	32	45	48	52	72	66	76
	Minimum	38	29	40	42	34	25	40	35	45	39	16	19	8	9	15	19	....	10	29	38	38	20	15	20	25	25	28	28	52	36	39
Poplar Bluff	Maximum	54	61	65	67	54	57	50	69	67	53	33	40	31	25	28	31	33	47	34	61	64	33	30	49	41	53	55	57	75	65	73
	Minimum	24	37	38	43	42	26	27	34	37	36	16	15	18	0	2	16	19	23	20	20	30	23	16	17	29	21	27	28	31	35	38
Ozark Plateau.																																
Birchtree	Maximum	55	47	62	61	55	55	55	62	62	54	36	36	31	23	23	28	30	39	33	57	62	56	40	46	48	55	63	57	70	62	68
	Minimum	42	30	35	47	35	25	38	35	33	36	11	15	11	4	14	16	21	27	16	26	37	15	15	31	18	19	35	30	49	38	26
Cassville	Maximum	49	45	65	54	59	56	53	52	64	52	47	46	29	27	24	28	32	36	45	50	61	44	45	49	52	50	62	65	66	76	75
	Minimum	39	23	28	41	33	25	24	31	29	38	25	23	10	16	15	18	25	24	19	25	38	12	18	19	17	23	25	23	42	27	12
Eldon	Maximum	52	58	54	61	49	59	52	56	59	54	28	41	27	31	27	20	30	31	42	42	61	34	39	36	48	54	48	66	67	63	57
	Minimum	28	32	26	32	29	29	31	34	31	19	7	16	8	3	14	0	11	19	10	22	34	6	9	12	14	17	24	28	44	38	1
Fruit City	Maximum	55	48	62	59	60	55	51	56	62	51	35	36	32	24	22	27	31	38	32	49	63	55	40	48	49	46	57	60	69	63	69
	Minimum	37	31	40	47	35	30	40	40	39	35	10	19	10	5	15	17	20	29	15	26	37	15	15	30	21	25	28	33	50	37	28
Gano	Maximum	54	50	56	58	52	58	51	58	59	54	32	40	35	28	24	25	31	34	36	44	62	50	40	41	47	50	54	56	66	61	63
	Minimum	38	32	32	45	31	29	35	37	34	32	7	17	7	2	13	13	12	21	12	26	37	8	9	28	17	19	36	32	47	30	18
Hollister	Maximum	52	60	64	60	58	56	60	58	56	50	40	36	38	30	28	32	34	38	48	52	50	18	44	48	42	44	48	56	74	68	56
	Minimum	40	38	32	38	40	22	28	38	40	40	14	14	12	8	12	16	28	32	20	38	42	16	12	16	18	22	26	28	34	30	28
Ironton §§	Maximum	57	55	58	59	47	54	48	61	61	46	26	39	24	25	21	27	33	40	34	48	62	25	40	45	48	45	54	54	69	60	70
	Minimum	37	25	35	36	33	24	38	34	37	40	10	14	10	−2	14	16	19	29	8	20	36	14	10	25	16	21	28	25	45	26	38
Lebanon §§	Maximum	56	60	60	67	56	55	58	55	61	43	28	45	20	....	....	....	....	....	....	....	62	23	37	34	47	52	55	65	68	62	60
	Minimum	24	31	30	28	33	33	33	35	34	33	9	9	9	6	14	14	12	21	16	17	21	9	8	14	19	23	25	27	46	33	33
Mountain Grove §§	Maximum	52	53	60	60	45	56	53	54	60	41	29	31	22	24	22	29	30	34	36	54	61	21	39	49	48	55	56	61	68	62	58
	Minimum	24	39	29	36	34	30	32	36	34	32	10	9	8	6	8	14	16	22	15	21	29	11	12	15	20	22	30	34	38	38	39
Neosho	Maximum	53	63	65	68	59	59	55	56	63	57	38	49	29	31	29	28	31	34	46	52	61	44	42	39	51	55	59	68	67	74	65
	Minimum	41	36	26	37	32	29	39	37	30	31	16	26	11	6	17	18	21	27	19	26	42	10	10	20	16	26	26	29	37	30	17
Rolla §§	Maximum	55	55	60	63	46	56	49	59	61	42	29	43	20	29	23	26	31	32	43	60	60	22	42	38	47	56	60	68	62	64	61
	Minimum	23	32	32	32	32	31	34	36	34	34	8	8	9	5	6	12	12	21	15	14	37	7	8	14	19	20	21	32	40	31	31
Springfield	Maximum	50	62	59	63	45	57	51	50	59	49	27	44	17	24	21	26	30	32	41	47	61	19	38	36	47	54	56	64	65	64	61
	Minimum	36	36	36	40	31	33	39	41	36	21	11	15	8	10	16	16	22	24	19	32	17	8	15	26	22	34	37	39	48	42	5
Southwest Plain.																																
Amoret	Maximum	35	38	50	50	50	58	54	55	62	56	52	40	27	30	28	28	28	33	34	40	60	30	39	....	....	....	....	65	68	66	58
	Minimum	20	22	20	30	27	28	32	25	30	30	10	9	8	5	14	7	15	18	17	21	20	3	8	18	24	19	25	31	36	29	10
Clinton	Maximum	45	50	55	55	51	58	49	55	62	54	29	39	26	34	30	25	32	46	37	40	60	32	37	38	49	57	62	68	68	66	57
	Minimum	30	28	27	30	29	30	32	30	32	23	10	21	10	6	17	18	18	12	15	23	32	7	10	20	20	25	30	32	40	30	12
Harrisonville §§	Maximum	39	55	44	46	46	54	42	52	59	40	23	30	20	30	24	19	29	30	42	54	54	18	34	53	45	52	47	63	65	60	28
	Minimum	26	23	35	32	30	30	33	28	30	35	11	24	10	10	20	9	18	20	13	18	18	5	5	10	22	22	25	25	37	29	28
Lamar §§	Maximum	57	67	65	60	52	60	57	49	63	44	45	42	21	30	24	22	30	34	48	60	62	21	41	38	52	58	60	71	72	70	33
	Minimum	35	33	26	29	31	31	21	20	23	24	3	7	−1	−3	18	14	16	22	17	26	30	8	9	19	19	28	26	31	41	35	32
Lamonte	Maximum	45	52	51	47	40	51	52	52	58	52	26	33	19	33	27	20	26	29	42	42	58	29	35	35	45	55	46	65	67	56	48
	Minimum	36	29	27	32	29	21	28	25	32	25	8	19	9	4	14	2	14	15	9	15	29	5	9	14	19	19	20	28	28	27	....
Marshall	Maximum	43	50	44	42	....	55	49	51	59	55	23	31	24	30	....	23	27	....	40	42	58	27	34	28	44	44	43	64	61	54	45
	Minimum	30	24	29	28	....	27	29	23	30	20	6	17	7	11	....	4	18	....	12	21	27	3	8	19	18	16	18	27	41	25	8
Warrensburg	Maximum	45	54	52	47	46	56	48	54	60	54	28	31	18	35	32	19	28	31	44	46	57	27	36	35	46	54	47	66	67	59	49
	Minimum	32	28	32	37	27	34	30	28	33	24	9	17	8	9	15	4	15	19	15	24	27	5	9	21	22	19	21	35	39	26	9
Warsaw §§	Maximum	48	62	58	62	50	60	54	57	65	58	32	40	28	35	30	29	31	34	46	44	62	38	39	37	50	57	53	67	70	66	60
	Minimum	35	23	25	29	30	24	32	29	32	32	9	10	10	2	17	7	13	22	8	15	36	8	6	14	12	23	22	21	36	25	15
Northwest Plateau.																																
Avalon	Maximum	45	43	42	37	40	52	50	54	58	49	26	28	20	33	30	21	26	31	39	42	55	30	33	33	41	39	42	62	61	59	50
	Minimum	26	36	37	34	25	30	34	33	35	26	7	20	7	4	10	6	17	20	20	30	30	0	12	17	20	22	24	30	35	30	10
Grant City	Maximum	41	40	45	41	41	46	40	44	52	48	21	22	16	22	22	19	26	30	45	40	48	18	34	34	35	31	36	57	59	44	40
	Minimum	22	24	20	30	20	26	22	22	32	15	4	12	−4	−5	8	2	12	17	15	18	17	−5	2	12	14	12	12	27	32	20	0
Kansas City	Maximum	47	48	48	42	45	52	40	54	56	50	26	26	19	35	27	19	27	32	43	36	54	15	36	36	41	50	48	65	62	55	40
	Minimum	30	32	25	33	26	38	31	30	35	17	11	11	5	13	13	5	14	19	22	25	9	3	12	23	22	19	22	40	36	28	−3
Kidder §§	Maximum	45	42	45	38	44	52	42	56	56	39	24	24	26	31	22	19	26	31	42	51	60	15	34	35	40	38	45	63	56	50	43
	Minimum	28	35	25	33	21	32	26	27	34	34	7	19	1	2	14	1	18	20	18	21	50	0	9	16	20	14	18	38	43	24	30
Lexington §§	Maximum	45	48	44	40	44	54	40	52	56	40	25	28	18	35	25	20	28	31	41	38	57	16	32	35	41	55	44	62	61	51	30
	Minimum	31	31	27	32	27	30	30	26	31	36	10	19	6	5	18	4	13	18	15	23	32	4	10	20	24	17	18	32	40	26	28
Maryville §§	Maximum	43	35	46	36	41	47	38	50	46	40	22	22	14	26	22	19	28	30	44	45	46	10	33	33	35	34	43	58	45	45	15
	Minimum	20	20	21	20	17	17	20	20	24	28	3	3	−3	−5	−5	2	2	16	16	17	17	−5	−7	7	10	13	13	13	25	20	15
Oregon	Maximum	40	44	45	40	39	41	39	49	54	48	22	20	14	28	23	18	26	28	40	33	45	12	31	30	35	38	43	56	51	48	39
	Minimum	20	26	21	30	18	31	24	24	31	18	5	10	−1	2	12	2	15	17	19	18	12	−5	3	12	17	16	16	34	30	23	−4
St. Joseph	Maximum	44	38	49	38	42	48	40	53	55	46	21	23	17	33	25	18	27	31	42	37	52	12	34	35	39	41	47	63	51	52	35
	Minimum	28	30	26	29	22	36	28	24	34	16	8	8	3	7	11	5	17	21	21	22	7	−2	10	16	21	17	18	37	32	26	−8
Trenton	Maximum	44	39	39	37	38	38	45	51	51	48	22	21	15	26	23	22	28	29	39	38	42	22	32	32	37	33	37	57	50	47	46
	Minimum	26	25	26	28	22	27	26	23	32	22	6	15	4	1	11	3	17	19	16	18	22	0	7	14	18	13	14	27	35	22	8

. . , etc., indicate respectively 1, 2, 3, etc., days missing from the record,

§§ Instruments are read in the morning: the maximum temperature then read is charge

the preceding day, on which it almost always occurs.


F
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
0.5
1
2
4
6
8

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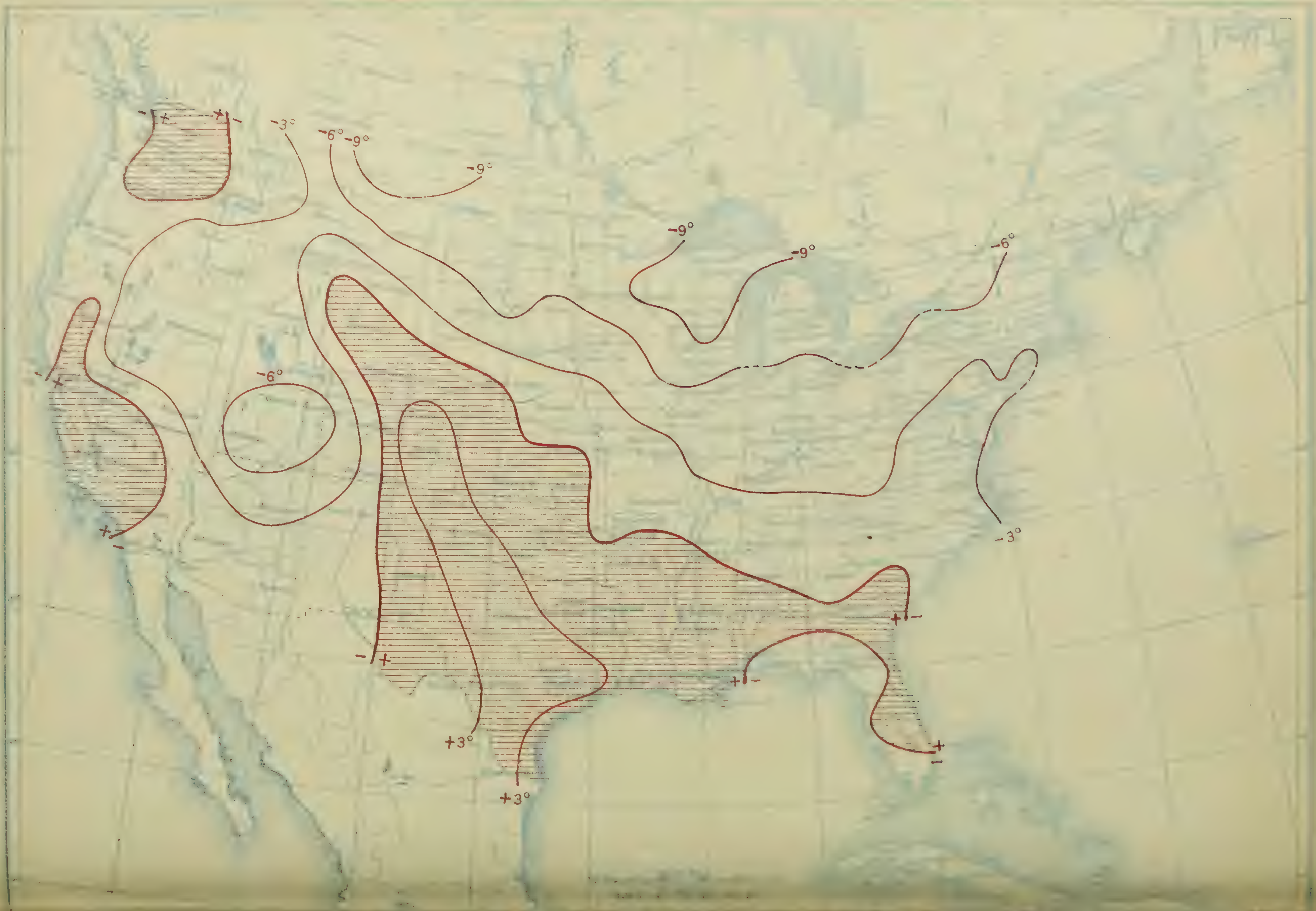
FEBRUARY, 1917

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 21, 1917.

Departure of the Mean Temperature from the Normal, February, 1917.



J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

.. XXI. COLUMBIA, MO., FEBRUARY, 1917. No. 2.

GENERAL SUMMARY.

ebruary, 1917, in Missouri was characterized by much ght weather and scanty precipitation. It was the driest ruary since 1870; and the entire winter, (December, Janu- and February) was the driest since 1876-77.

he month opened with a severe cold wave, and the following days or two weeks were somewhat colder than usual but the ainder of the month was, as a rule, milder than normal. rked varitions in temperature occured; during the first two hree days temperatures were from near zero in southern to or more below zero in northern counties, the minimum g 22° below zero on the 2d, while during the last decade re were several summer-like days, when the maxima were und 70° in the northern counties and 80° or higher in thern divisions. The greatest monthly range was 108°, from ninimum 22° below zero on the 2d to 86° above zero on 26th.

Vheat made no growth, and most plants showed but slight age. From a distant inspection the condition seemed to be . but a close examination revealed in all cases a good root wth, and consequently the crop is capable of making a fair good showing if sufficient moisture falls within a reasonable e and especially before very warm weather sets in. There been no trace of inset damage; but high winds have done e injury by blowing away the soil from the roots.

rass is suffering from lack of moisture, and much of it is ught to be dead. The fair, sunshiny weather, however, was rable for stock. Many farmers have had to haul water ing the past two months or more; and wells are drier, for time of year, than for many years. Some stockmen have n compelled to ship their stock before finishing time because shortage in water. For the same reason very little ice was ised. Nearly all of the best varieties of peaches were killed severe cold on the 1st and 2d.

TEMPERATURE.

he monthly mean temperature, 67 stations reporting, was 5°. The mean departure from the normal for 62 stations ing 10 or more years' record was minus 1°. The northeast in, with a deficiency of 2.6° was the coldest part of the te; in the eastern part of the Ozark plateau and the south- tern lowlands there was a slight temperature excess. The t three days of the month were abnormally cold everywhere; the 2d, the coldest day, the temperatures ranged from near o in the southern to 20° or more below zero in the northern nties. On the other hand during the last ten days of the nth there were several days when temperatures were 70° or her. Minimum temperatures were 32° or lower on 25 days: d the number of typical winter days, i. e., days on which maximum temperature did not rise above 32°, was 6, the ne as in January; zero conditions occured on 3 days.

PRECIPITATION.

The average precipitation, 85 stations reporting, was 0.41 h, which is the least amount for this month since 1870. e departure from the normal for 75 stations having 10 or re or more years record was minus 2.03 inches. The south- tern lowlands received as much rain as the remainder of the te put together, and still the deficiency there amounted to 0 inches. Thirty-two stations received one-tenth of an inch less: and at eight stations the total monthly fall was inappreciable. Along the southern slope of the Ozark plateau the snowfall varied between 2 and 5 inches, a few stations receiving from 8 to 10 inches, but over the rest of the State the monthly fall was unusually light. The greatest local monthly precipitation was 2.76 inches at Caruthersville; at Kidder there was no precipitation. The greatest amount recorded in any twenty-four consecutive hours was 1.24 inches at Caruthersville, on the 28th. The average number of days with 0.01 inch or more precipitation was 2.

WIND.

The prevailing winds were from the northwest. The month was rather windy, and the hourly velocities, as recorded at 8 stations having anemometers, averaged higher than normal. A fresh to strong northwest gale prevailed on the 4th.

SUNSHINE AND CLOUDINESS.

The month was markedly bright. The average number of hours of sunshine, based upon records of 5 regular stations, was 216, which is about 68 per cent of the possible, and 17 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs—19th.

Halos, solar—1st, 7th, 10th, 11th, 14th, 15th, 17th, 18th, 24th, 27th and 28th.

Halos lunar—1st, 2d, 3rd, 4th, 5th, 6th, 7th, 15th, 26th, 27th and 28th. Thunder was heard on the 18th, 19th, 22d and 23rd.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date
Columbia	30.12	72	......	201	67	7,317	10.9	45	nw.	4
Hannibal	30.13	74	......	......	......	7,446	11.1	38	nw.	4
Kansas City	30.14	68	50	225	75	9,853	14.7	53	nw.	4
St. Joseph	30.15	76	49	245	82	7,314	10.9	42	nw.	4
St. Louis	30.12	75	64	150	50	10,023	14.9	52	nw	4
Springfield	30.12	71	55	190	63	8,841	13.2	44	nw.	4
Cairo, Ill	30.12	75	64	......	......	8,683	12.9	42	nw.	4
Keokuk, Iowa	30.15	75	66	221	71	6,392	9.5	36	w.	4

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature. Mean.	Departure.	Highest.	Lowest.	Precipitation. Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of Days. With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	33.0	+2.0	73	−11	2.04	−0.28	.....	.....	7	....	....	.....
1889	29.3	−1.7	73	−9	2.57	+0.25	.....	.....	7	....	....	...
1890	35.5	+4.5	81	−7	2.24	−0.08	.....	.....	7	....	....	....
1891	32.7	+1.7	76	−8	2.28	−0.04	......	2.4	6	....	....	...
1892	37.7	+6.7	71	2	4.15	+1.83	.....	.....	9	7	6	16
1893	27.9	−3.1	65	−20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30.8	−0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	−7.4	77	−26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+3.8	74	−15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35.4	+4.4	78	−9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	−32	2.17	−0.15	4.39	5.3	6	12	8	8
1900	26.2	−4.8	70	−16	3.92	+1.60	2.85	16.6	10	10	6	12
1901	28.1	−2.9	76	−19	1.63	−0.69	2.36	7.6	6	13	7	8
1902	24.0	−7.0	72	−17	1.50	−0.82	2.35	5.3	5	11	8	9
1903	29.8	−1.2	74	−25	2.92	+0.60	2.65	5.8	7	11	6	11
1904	30.0	−1.0	82	−18	0.91	−1.41	1.46	1.5	5	11	8	10
1905	21.5	−9.5	69	−40	1.64	−0.68	1.20	13.2	8	11	6	11
1906	33.7	+2.7	73	−13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+4.6	78	−7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+7.8	71	−4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	−2.7	72	−24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	6.3	8	12	5	11
1912	28.3	−2.7	72	−12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	−1.7	78	−9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+0.2	78	−12	0.98	−1.48	2.70	5.0	5	13	6	10
1917	30.5	−1.0	83	−22	0.41	−2.03	1.24	1.4	2	14	7	7

Climatological data for February, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	621	39	...	...	...	...	...	...	...	0.16	−2.47	0.14	T.	2	20	2	6	nw.	C. Randecker.
Brunswick	Chariton	652	36	27.0	−1.5	68	25	−14	2	47	0.05	−2.00	0.03	0.5	2	14	2	12	nw.	Louis Benecke.
Clifton Hill	Randolph	731	...	29.1	+1.8	70	22	−15	2	46	0.10	−1.86	0.05	T.	2	15	13	0	...	L. S. Harlan.
Columbia	Boone	784	26	28.3	−1.8	68	25	−13	2	39	0.25	−1.88	0.22	0.3	2	11	9	8	sw.	U. S. Weather Bureau.
Fayette	Howard	725	31	26.3	−2.8	68	25	−16	2	39	0.16	−1.96	0.09	0.7	3	...	...	...	...	Prof. T. B. Scott.
Fulton	Callaway	818	12	26.4	−5.8	68	25	−12	2	41	0.29	−1.86	0.26	0.3	3	17	9	2	nw.	Dr. O. M. Weigle.
Glencoe	St. Louis	479	...	...	...	...	...	...	...	...	0.35	...	0.35	T.	1	9	5	14	n.	Vint E. Nees.
Gorin	Scotland	700	27	...	...	...	...	...	...	...	0.07	−1.59	0.07	T.	1	5	15	8	nw.	J. W. Pulham.
Hannibal	Marion	534	23	25.6	−3.5	66	25	−16	2	38	0.10	−1.50	0.04	0.9	4	11	11	6	nw.	U. S. Weather Bureau.
Hermann	Gasconade	519	42	...	...	...	...	...	...	...	0.65	−1.78	0.60	T.	3	7	5	16	nw.	C. J. Maushund.
Jefferson City	Cole	557	30	28.5	−2.3	68	25	−11	2	50	0.37	−1.88	0.36	0.1	2	19	3	6	n.	Miss Emma Swift.
Keytesville	Chariton	660	3	...	...	...	...	...	...	...	0.08	...	0.05	0.7	3	...	...	...	...	J. T. Dewey, M. D.
Louisiana	Pike	469	38	28.9	+0.5	66	25†	−13	2	47	0.21	−2.30	0.18	0.5	2	14	8	6	n.	J. T. Farrell.
Macon	Macon	875	18	23.4	−4.8	67	25	−16	2†	52	0.06	−2.19	0.06	T.	1	12	11	5	nw.	John A. Cook.
Mexico	Audrain	797	38	25.8	−2.9	67	25	−14	2	48	0.36	−2.14	0.20	1.0	2	15	13	0	n.	R. M. Llewellyn.
Oakfield	Franklin	500	24	30.6	−1.5	69	25	−12	2	42	0.17	−2.37	0.17	T.	1	11	11	6	nw.	E. L. Stones.
Pacific	do.	467	...	...	...	...	...	...	...	...	0.21	...	0.16	...	3	14	5	9	...	Russell C. Dougherty
Palmyra	Marion	652	4	22.5	−4.3	65	25	−17	2†	49	0.07	−2.31	0.05	0.5	2	11	5	12	nw	W. B. Markell.
St. Catherine	Linn	850	3	25.8	...	63	25	−17	2	41	0.01	...	0.01	0.5	1	15	11	2	nw.	L. D. Baker.
St. Charles	St. Charles	456	38	31.1	−0.6	68	25	−12	2	39	0.98	−1.94	0.88	1.0	2	8	11	9	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	30.4	−3.1	68	25	−10	2	39	0.35	−2.40	0.28	1.0	4	7	10	11	nw.	U. S. Weather Bureau.
St. Louis (2)	do.	578	4	29.4	...	68	25	−11	2	39	0.59	...	0.50	0.8	5	12	7	9	nw.	St. Louis University.
Shelbina	Shelby	...	...	...	...	...	...	...	...	...	T.	−2.10	T.	...	...	...	...	...	...	...
Steffenville	Lewis	650	23	23.2	−4.1	63	17	−17	2	42	0.42	−1.68	0.30	0.5	3	7	17	4	n.	Frank Hall.
Union	Franklin	568	...	...	...	...	...	...	...	...	0.27	...	0.18	T.	3	6	11	11	sw.	J. Wm. Keller.
Unionville	Putnam	1,072	23	19.6	−4.7	64	25	−22	2	52	0.16	−1.90	0.16	1.0	1	19	4	5	n.	Geo. W. Davis.
Valley Park	St. Louis	430	...	...	...	...	...	...	...	...	0.50	...	0.40	0.8	3	12	5	11	nw.	H. J. Lucksinger.
Warrenton	Warren	865	25	26.2	−3.3	67	25	−13	3	52	0.11	−2.40	0.06	1.0	2	5	13	10	nw.	Prof. J. H. Frick.
Section means and extremes				26.7	−2.6	70	22	−22	2	52	0.25	−2.02	0.88	0.5	2	12	9	7	nw.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	...	...	...	...	...	...	...	1.70	−0.69	0.70	9.0	3	10	4	14	w.	D. L. Albert.
Cardwell	Dunklin	270	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	F. E. Tate.
Caruthersville	Pemiscott	220	25	41.6	+3.8	80	26	4	2	42	2.76	−1.32	1.24	T.	5	17	3	8	s.	H. E. Averill.
Doniphan	Ripley	344	11	39.0	+1.6	79	26	0	2	46	2.20	−1.60	1.00	T.	3	16	4	8	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	34.6	−0.4	78	26	− 5	2	43	1.21	−2.11	0.66	11.0	3	6	9	13	n.	L. M. Bean.
Marble Hill	Bollinger	420	24	36.1	+1.2	80	26	− 7	2	48	1.62	−2.05	1.20	10.5	2	14	10	4	n.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	...	...	...	...	...	...	...	2.15	−2.06	1.00	0.0	7	10	4	14	ne.	Miss Josie Smith.
Patton (near)	Bollinger	500	1	...	...	...	...	...	...	...	0.30	...	0.20	2.0	2	18	0	10	n.	George F. Ellis.
Poplar Bluff	Butler	339	12	35.4	−0.2	77	26	− 1	2	49	1.59	−2.07	1.12	4.0	3	16	10	2	...	Miss Belle Kinne.
Sikeston	Scott	328	15	38.0	+1.7	77	26	− 4	2	42	2.00	−1.63	1.11	T.	6	9	13	6	ne.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill.	359	43	35.6	−2.0	75	26	− 4	2	35	1.54	−1.79	0.64	1.1	6	7	9	12	n.	U. S. Weather Bureau.
Section means and extremes				37.2	+0.8	80	26	− 7	2	49	1.71	−1.70	1.24	3.8	4	12	7	9	n.	
Ozark Plateau.																				
Arlington	Phelps	767	14	...	...	...	...	...	...	...	T.	−2.91	T.	T.	0	14	1	13	nw.	G. V. Randolph.
Birchtree	Shannon	1,078	22	34.6	+0.4	82	26	− 7	2	40	0.63	−2.21	0.43	4.0	2	22	4	2	nw.	V. H. Kirkendall.
Bolivar	Polk	1,071	28	32.2	−1.9	66	25†	−10	2	48	0.20	−2.27	0.16	0.0	2	19	7	2	nw	A. C. Fink.
Cassville	Barry	1,500	5	35.6	...	76	27	− 5	1†	53	0.52	−1.52	0.27	8.5	3	19	2	7	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,126	5	36.4	+6.4	68	25	−11	2	42	T.	...	T.	0.0	0	25	0	1	...	Roy W. Reed.
Dean	McDonald	1,000	17	37.6^b	+3.8	74	25†	− 5	1	58	0.82	−1.32	0.65	8.2	3	21^a	2^a	4^a	...	H. E. Dean.
Eldon	Miller	934	15	29.3	−2.4	67	22	−13	2	42	0.05	−2.56	0.05	T.	1	12	14	2	nw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	37.8	...	81	26	0	1†	40	0.30	−3.45	0.20	1.0	3	17	7	4	n.	R. C. Walton.
Gano	Dent	1,250	12	31.8	−2.6	73	26	−11	2	41	0.27	−2.54	0.14	1.3	3	16	7	5	nw.	A. C. Leach.
Goodland	Iron	1,000	11	33.6	+1.3	71	26	− 9	2	47	0.12	−2.70	0.07	0.0	2	19	6	3	w.	F. M. Adams.
Hollister	Taney	735	7	38.0	+0.1	76	23	− 4	2	38	0.10	−3.18	0.10	1.0	1	21	0	7	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	34.8	+2.6	76	26	− 7	2	41	0.15	−2.33	0.10	2.0	2	15	5	8	nw.	R. F. Harmon.
Ironton	Iron	925	38	33.5	+0.2	79	26	−10	2	46	0.25	−3.18	0.13	1.2	3	5	11	12	ne.	W. H. Delano.
Koshkonong	Oregon	958	15	38.3	+1.7	83	26	− 3	2	39	1.56	−1.61	0.76	6.0	4	15	3	10	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	31.0	−2.9	70	25	− 9	2†	52	0.33	−2.41	0.23	0	2	18	3	7	s.	Leonard E. Dickerson.
Lockwood	Dade	1,078	21	33.8	−1.2	74	23	− 9	2	44	0.36	−1.93	0.36	T.	1	12	6	10	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	31.7	−1.8	75	26	− 8	2†	50	0.48	−2.20	0.44	5.0	2	17	5	6	nw.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	35.2	+1.7	73	22	− 8	2	43	0.50	−2.33	0.50	2.5	1	18	3	7	nw.	J. R. White & Son.
Neosho	Newton	1,011	33	35.8	−0.5	72	22	− 6	2	42	0.78	−1.83	0.57	10.2	3	19	7	2	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	30.4	−5.0	70	25	−13	3	54	0.12	−2.32	0.10	1.3	2	15	11	2	nw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	33.0	−0.6	70	25	−10	2	38	0.47	−1.80	0.23	4.0	3	16	6	6	nw.	U. S. Weather Bureau.
Steelville	Crawford	755	15	...	...	...	...	...	...	...	0.05	−2.48	0.03	0.2	2	13	4	11	sw.	Thomas D. Slater
Section means and extremes				34.2	−0.0	83	26	−13	2†	58	0.37	−2.34	0.76	2.7	2	17	5	6	nw.	
Southwest Plain.																				
Amoret	Bates	831	7	31.2	−2.3	75	22	−12	2	47	0.07	−2.87	0.07	T.	1	16	4	8	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	32.4	+0.7	74	22	−10	2	45	0.11	−2.05	0.11	T.	1	11	13	4	ne.	W. G. Bigelow.
Clinton	Henry	765	29	31.6	+0.2	71	25	−10	2	42	0.12	−2.19	0.12	0	1	15	10	3	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	27.0	−2.5	74	22	−11	1	51	0.07	−2.11	0.05	1.0	2	8	5	15	nw.	A. J. Sharp.
Lamar	Barton	980	35	34.9^a	+0.8	75	21	− 8	2	44	0.14	−2.33	0.14	0	1	18	2	8	sw.	Dick B. Houston.
Lamonte	Pettis	863	27	28.7	−2.5	70	25	−12	2	43	0.10	−1.98	0.10	1.0	1	16	11	1	ne.	J. Ed. Hall.
Marshall	Saline	779	25	28.7	−0.3	68	22†	−13	2	45	0.12	−1.88	0.10	1.0	2	13	7	8	nw.	Prof. W. H. Black.
Nevada	Vernon	860	22	34.4	+3.0	74	22	− 9	2	38	0.04	−2.16	0.04	T.	1	19	5	4	ne.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	29.8	−1.3	69	25	−12	2	42	0.04	−2.16	0.02	0.2	2	11	15	2	nw.	Geo. H. Collins.
Warsaw	Benton	687	11	31.6	−1.7	71	25	−12	2	46	0.38	−2.42	0.28	1.0	2	16	12	0	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	...	...	...	...	...	...	...	0.08	...	0.04	0.5	3	18	0	10	nw.	John W. Cauthorn.
Section means and extremes				30.9	−0.7	75	21†	−13	2	51	0.12	−2.22	0.28	0.4	2	14	8	6	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	29.0	+1.6	67	25	−15	2	37	T.	−2.18	T.	T.	0	22	6	0	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	23.8	−2.4	62	22†	−19	2	48	0.05	−1.54	0.05	T.	1	12	15	1	nw.	M. H. Moulton.
Chillicothe	Livingston	779	1	...	...	...	...	...	...	...	T.	−2.52	T.	T.	0	15	2	11	...	Hocey O. Dupy.
Conception	Nodaway	982	31	24.0	−2.4	67	22	−21	2	49	T.	−1.28	T.	T.	0	8	18	2	nw.	Fr. Adelhelm Hess.
Gallatin	Davies	803	16	...	...	...	...	...	...	...	0.03	−1.66	0.03	0.3	1	18	6	4	nw.	Robert R. Wynne, Jr.
Grant City	Worth	1,134	23	24.8	−1.8	64	22†	−20	2	45	T.	−1.15	T.	T.	0	16	3	9	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	29.4	−0.5	73	22	−12	2	46	0.07	−1.52	0.05	0.8	3	16	11	1	n.	U. S. Weather Bureau
Kidder	Caldwell	1,020	25	27.2	+0.5	72	22	−17	2	50	0	−1.61	0	0	0	17	10	1	nw.	J. F. Sharp.
Lexington	Lafayette	688	34	28.0	−1.0	69	25	−13	2	43	0.04	−2.10	0.02	0.4	2	13	0	15	n.	J. W. Keithley.
Liberty	Clay	864	27	...	...	...	...	...	...	...	0.05	−1.96	0.05	0.5	1	...	...	...	...	W. C. Wilmott.
Maryville	Nodaway	1,036	25	19.9	−3.4	65	25	−21	2†	58	0.10	−1.45	0.10	1.0	1	18	5	5	n.	J. R. Brink.
Oregon	Holt	1,048	60	25.3	−2.7	66	22	−18	2	53	0.40	−1.33	0.35	0.5	2	14	14	0	sw.	Tom Curry.
St. Joseph	Buchanan	967	14	27.0	...	70	22	−16	2	46	0.02	−1.34	0.02	0.2	1	11	15	2	nw.	U. S. Weather Bureau.
Tarkio	Atchison	976	4	25.4	−1.4	68	25	−19	2	44	T.	−1.10	T.	T.	0	18	5	5	nw.	John F. Frazier.
Trenton	Grundy	822	21	25.5	−2.2	61	25	−17	2	36	0.37	−1.37	0.31	T.	2	12	11	5	nw.	W. H. Estes.
Section means and extremes				25.8	−1.4	73	22	−21	2†	58	0.08	−1.64	0.35	0.3	1	15	9	4	nw.	
State means and extremes				30.5	−1.0	83	26	−22	2	58	0.41	−2.03	1.24	1.4	2	14	7	7	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on other dates. ‡‡Received too late to be included in means and summaries. ‡‡Post office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5.

Daily precipitation for February, 1917.

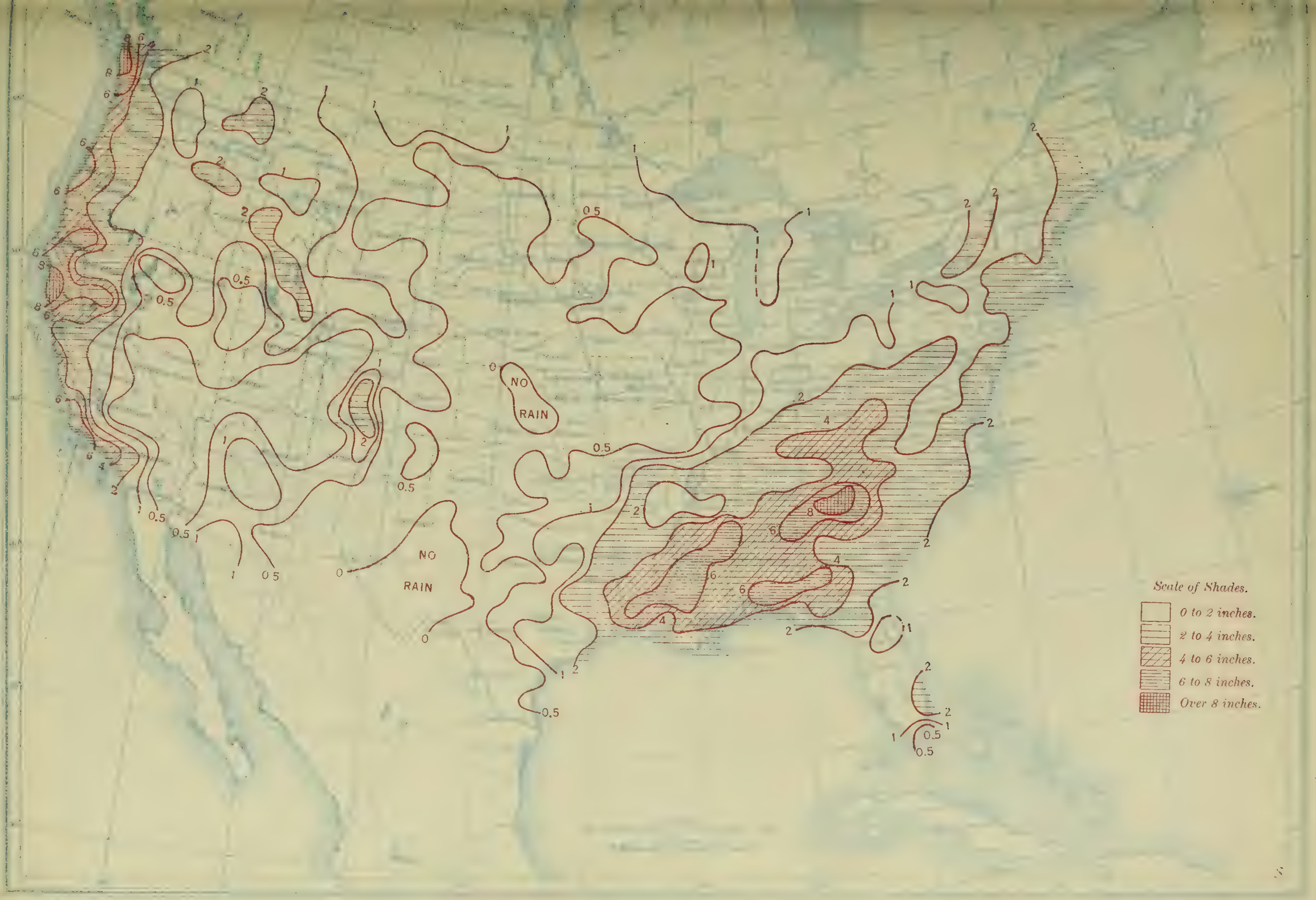
tations.	Watersheds.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
heast Plain.																																	
e ‖	Missouri				T.	T.														.14		T.		.02									0.16
ek	Grand					.03														T.		.02											0.05
Hill	Chariton				T.														.05		.05												0.10
a***	Missouri				.03				T.									T.	T.	.22	T.			T.									0.25
	do				.05															.09	.02												0.16
	do				.02															.26	.01												0.29
‖	Meramec				T.	T.													T.	.35													0.35
	Mississippi				T.																		.07										0.07
l***	do		T.		.04		T.		T.		T.					T.		T.		.03	.02		.01										0.10
n‖	Missouri	T.			.02	.03				T.										.60		T.											0.65
City ‖	do					.01														.36		T.											0.37
lle	Chariton					.02														.01	.05												0.08
a	Mississippi		T.		.02				.01	T.										.18													0.21
	Chariton				T.						T.									.06				T.									0.06
	Mississippi					.20				T.										.16													0.36
	Meramec				T.				T.										T.	.17				T.					T.				0.17
	do																		.03	.16				.02									0.21
‖	Mississippi		T.		.05				T.		T.									.02		T.											0.07
erine	Grand				.01						T.													T.									0.01
les.	Missouri	T.			.10				T.										.88										T				0.98
(1)***	Mississippi	T.	T.		.06				T.					T.					.10	.18			T	.01				T.					0.35
(2)	do	T.	T.		.50				T.										.20	T.								.10					0.80
lle	do				.05														.07						.30								0.42
	Meramec					.01														.18				.08									0.27
le‖	Grand	T.			T.					.08	.08						T.							T.									0.16
ark ‖	Meramec				T.	.08				T.									T.	.40				.02					T.				0.50
on‖	Mississippi	T.			.06															.05		T.											0.11
st Lowlands.																																	
ardeau ‖	Mississippi	.60				T.										.40								T.					.70				1.70
sville	do				T.				T.						.19	.71		T.	T	T.				.15				.47	1.24				2.76
n	Black				T.									T.	T.	.65		T.		.55								T.	1.09				2.20
	Mississippi														.30					.25								.66					1.21
Hill	do					T.									T.	.42													1.20				1.62
drid	do	.10				.04									.01	.80				.10				.10					1.00				2.15
ear)	do																			.10									.20				0.30
Bluff‖	Black					T.									T.	.28			T.	.19									1.12				1.59
	Mississippi				T.									.02	.04	.44				.35				.04					1.11				2.00
***	do	T.	T.		.01	T.								T.	.18	.17			T.	.53				T.				.11	.54				1.54
Plateau.																																	
n‖	Gasconade																			T									T.				T.
	Black															.43													.20				0.63
	Osage																		.16				.04										0.20
	White				.01										.24	.27																	0.52
	Gasconade																						T.										T.
	Neosho				T.					.02					.65	.15																	0.82
	Osage				T.															.05	T.												0.05
	Black														.05	.20													.05				0.30
	Meramec				.08	T.			T.															.14					.05				0.27
l	Black																											.05	.07				0.12
	White															.10																	0.10
	Gasconade				.05											.10												T.					0.15
	Mississippi	T.				.02			T.							T.				.10				T.					.13				0.25
ong	Black				T.										.08	.60				.76									.12				1.56
	Osage																			.23				.10									0.33
d	do				T.															.36													0.36
Grove	White					T.	T.	T.								.44				.04													0.48
on	Neosho															.50																	0.50
	do	T.			.01									T.	.20	.57								T.									0.78
	Meramec				T.	.10														.02					T.				T.				0.12
ld**	White	T.			.04										.23				.20		T.			T.									0.47
‖	Meramec					T.														.03				T.					.02				0.05
st Plain.																																	
	Osage				T.															.07									T.				0.07
City	do				T.															.11													0.11
	do																			.12													0.12
ville	do	T.			.05													T.		.02													0.07
	Neosho																			.14													0.14
	Missouri				.10														T.		T.			T.									0.10
	do	T.			.10				T.											.02	T.												0.12
	Osage				T.															.04													0.04
urg	Missouri				.02															.02	T.			T.									0.04
	Osage	T.			.10				T.											.28	T.			T.									0.38
	Missouri				.04															.01		.03	T.										0.08
st Plateau.																																	
	Grand																									T.							T.
	do				T.																			.05									0.05
e ‖	do				T.																												T.
on	Missouri															T.																	T.
	Grand				.03						T.																						0.03
y	do				T.																												T.
ity***	Missouri				.05															.01	.01												0.07
	Grand																																
n	Missouri				.02																	.02											0.04
	do				.05																T.												0.05
	do				.10				T.		T.									T.													0.10
	do					.05			T.														.35										0.40
***	Missouri				.02						T.				T.	T.				T.			T.				T.						0.02
	do																																
	Grand				.06					T.						T.							.31				T.						0.37

ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the bservation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. ar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate all not recorded.

Daily temperatures for February, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	13	15	36	5	32	50	52	33	28	31	25	32	52	38	35	59	51	36	48	35	54	67	43	42	68	47	41	47			
	Minimum	-8	-14	-11	-2	2	5	35	28	6	7	5	7	9	19	20	22	28	20	22	15	19	23	23	18	28	36	22	20			
Columbia	Maximum	6	3	36	38	24	48	47	38	24	29	21	33	44	35	38	56	52	33	52	33	53	64	56	37	68	62	31	41			
	Minimum	-10	-13	3	-1	2	16	32	12	8	16	7	9	26	22	24	29	25	23	28	20	28	27	26	20	31	28	23	21			
Fayette	Maximum	2	4	35	35	25	48	47	32	23	27	18	30	46	35	36	55	49	32	51	29	54	65	53	38	68	56	32	42			
	Minimum	-12	-16	8	-4	0	13	30	8	4	12	3	6	25	18	23	26	22	20	22	17	20	25	22	18	30	25	22	19			
Hannibal	Maximum	5	4	34	29	21	45	46	36	20	25	16	27	44	34	38	52	48	34	52	27	53	55	54	36	66	56	34	39			
	Minimum	11	-16	3	-4	-1	13	31	7	4	14	5	6	24	17	21	24	22	21	24	15	24	23	23	17	28	25	21	21			
Jefferson City §§	Maximum	12	12	40	10	31	49	45	35	28	31	22	34	42	37	45	56	58	38	56	38	55	65	41	39	68	55	35	42			
	Minimum	-3	-11	10	3	0	5	30	33	7	10	8	8	11	22	23	27	30	24	21	22	22	28	34	20	27	34	24	22			
Macon §§	Maximum	5	9	33	2	27	46	48	29	22	28	20	31	48	39	33	55	47	33	48	28	51	60	37	37	67	47	35	42			
	Minimum	-5	-16	-16	-2	-5	-1	25	28	3	3	2	4	8	16	17	22	27	17	18	12	12	20	20	15	15	30	19	12			
Mexico §§	Maximum	8	9	35	5	24	48	46	36	27	30	29	30	45	45	41	55	55	56	54	30	54	61	39	38	67	53	31	42			
	Minimum	0	-14	-1	4	-2	0	31	32	5	10	-3	5	-3	5	19	11	16	21	21	16	22	23	24	17	29	38	21	19			
Oakfield	Maximum	21	7	41	35	24	46	45	38	25	36	24	30	42	39	50	54	61	38	60	44	62	58	60	42	69	67	42	41			
	Minimum	2	-12	-1	0	0	14	30	21	5	17	7	6	21	21	25	26	37	25	30	21	27	26	30	15	29	40	24	25			
St. Catharine	Maximum	10	4	32	30	22	48	48	43	21	25	21	30	47	41	36	54	50	30	43	32	50	61	58	40	63	60	34	39			
	Minimum	-9	-17	-2	-5	-2	12	31	14	1	16	3	5	20	16	19	20	28	15	26	11	18	20	25	14	30	31	17	17			
St. Louis (1)	Maximum	14	8	38	40	23	43	45	39	23	31	20	28	42	40	47	52	59	34	60	38	62	55	60	38	68	66	35	42			
	Minimum	-1	-10	3	1	1	18	32	12	7	20	11	9	22	24	28	29	29	27	31	25	30	30	30	24	31	32	26	28			
Unionville §§	Maximum	9	0	30	0	22	40	56	31	22	26	16	30	38	40	34	52	48	36	34	28	42	56	32	36	64	35	33	42			
	Minimum	-9	-22	-20	-4	-10	0	20	26	0	1	-3	-2	5	18	20	20	20	10	11	7	6	14	18	16	12	18	14	12			
Warrenton §§	Maximum	9	9	39	9	22	43	41	33	23	29	20	30	41	36	47	54	55	35	50	34	55	59	48	38	67	55	33	46			
	Minimum	2	-12	-13	4	-3	1	21	31	4	4	5	5	6	20	19	25	29	24	24	19	19	26	26	20	21	32	23	22			
Southeast Lowlands.																																
Cardwell	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....			
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....			
Caruthersville	Maximum	54	21	38	44	30	49	53	58	40	47	39	38	53	48	47	60	66	56	69	63	74	68	74	56	74	80	70	45			
	Minimum	15	4	8	13	9	17	35	35	16	22	22	15	22	37	36	35	40	37	40	36	32	35	55	32	34	61	36	36			
Doniphan	Maximum	40	17	39	43	31	47	54	54	49	46	50	32	46	43	45	58	58	64	65	58	70	63	76	56	73	79	73	40			
	Minimum	9	0	8	11	8	13	29	29	13	23	18	12	18	36	28	34	34	40	36	31	27	29	52	28	27	60	33	32			
Jackson	Maximum	40	30	30	30	30	40	50	47	47	40	31	30	35	35	40	50	60	50	55	53	57	60	72	56	70	78	62	66			
	Minimum	7	-5	5	7	5	11	24	31	9	18	14	6	20	32	18	20	33	32	25	27	26	27	34	25	27	60	31	30			
Marble Hill	Maximum	39	13	30	33	30	38	55	52	38	45	38	32	40	42	44	48	65	58	65	59	65	60	73	50	73	80	63	60			
	Minimum	-6	-7	1	8	5	10	25	30	9	19	12	8	18	32	25	30	39	35	35	27	25	25	38	38	25	62	45	30			
Poplar Bluff §§	Maximum	30	24	37	40	33	49	54	55	34	47	33	34	48	41	48	60	70	44	69	55	71	63	75	52	73	77	38	41			
	Minimum	7	-1	9	13	8	10	22	30	12	12	17	10	11	19	29	29	21	32	34	29	27	29	29	28	28	30	32	32			
Ozark Plateau.																																
Birchtree	Maximum	26	10	43	37	30	50	53	45	33	46	36	32	44	43	44	52	61	54	65	....	66	61	72	....	70	82	70	38			
	Minimum	0	-7	3	5	5	14	21	30	9	22	14	10	20	39	26	28	37	32	35	....	20	31	39	26	33	7	31	29			
Cassville	Maximum	15	12	45	39	39	63	45	42	45	50	39	43	47	41	43	58	63	60	65	63	63	73	74	55	71	73	76	39			
	Minimum	-5	-5	6	5	7	15	27	28	11	16	15	11	27	27	11	23	21	27	31	26	25	30	36	23	33	28	23	31			
Eldon	Maximum	4	7	40	40	29	50	47	35	28	36	24	38	43	37	45	56	55	40	57	40	57	67	55	35	64	60	35	38			
	Minimum	6	-13	2	-2	0	15	30	20	5	18	6	6	23	21	25	32	31	22	22	22	22	25	28	18	27	35	22	22			
Fruit City	Maximum	27	10	40	36	30	50	56	57	33	65	48	37	44	40	47	57	64	53	66	56	69	64	74	53	71	81	60	47			
	Minimum	0	5	0	5	5	15	30	31	18	26	13	10	20	35	35	30	37	31	35	22	30	32	42	25	31	59	30	31			
Gano	Maximum	18	5	41	38	27	48	53	44	27	38	28	34	41	38	47	55	60	50	60	56	61	60	60	45	68	73	49	38			
	Minimum	-3	-11	0	0	1	14	28	25	4	15	8	5	5	25	27	27	38	26	30	23	24	24	31	21	32	49	24	25			
Hollister	Maximum	24	16	40	14	40	56	50	36	30	32	38	40	46	44	46	60	52	58	68	70	66	74	76	68	64	62	44	38			
	Minimum	0	-4	4	10	4	28	32	14	14	18	14	18	24	36	24	30	40	46	42	36	30	36	58	58	54	44	30	34			
Ironton §§	Maximum	15	15	40	42	28	44	55	43	29	44	28	32	41	39	49	57	63	43	66	52	66	60	71	48	70	79	32	39			
	Minimum	1	-10	1	28	3	7	27	26	5	16	10	4	17	33	29	23	31	29	31	24	20	20	48	23	24	59	27	28			
Lebanon §§	Maximum	12	12	41	10	30	55	53	38	30	43	29	40	35	50	50	40	60	50	60	60	60	65	60	50	70	60	40	42			
	Minimum	-3	-9	-9	1	2	3	25	25	7	7	9	9	9	25	25	29	27	25	30	26	27	31	32	21	21	45	25	25			
Mountain Grove §§	Maximum	12	8	42	37	29	51	52	46	29	36	30	25	40	34	44	50	61	53	54	54	62	61	65	67	68	75	36	39			
	Minimum	-3	-8	-8	7	0	4	24	29	7	7	10	9	10	25	25	24	30	29	30	28	29	32	34	24	25	36	27	29			
Neosho	Maximum	19	11	45	42	34	53	50	46	40	45	38	45	50	43	44	53	59	56	60	58	61	72	69	55	71	71	50	44			
	Minimum	-5	-6	7	5	14	17	26	29	12	17	14	11	27	28	15	25	42	26	35	30	27	30	36	23	32	48	28	30			
Rolla §§	Maximum	10	9	41	22	27	52	51	35	28	40	26	37	42	35	49	56	62	45	61	54	60	65	59	47	70	69	37	42			
	Minimum	-2	-10	-13	9	0	4	26	31	3	5	8	7	8	25	24	26	29	26	26	24	26	29	30	19	20	43	25	25			
Springfield	Maximum	9	7	41	39	29	53	48	37	26	39	26	34	42	38	41	52	58	53	57	58	58	65	60	51	70	68	40	39			
	Minimum	-7	-10	7	1	4	22	32	19	10	22	11	13	26	26	24	32	36	27	38	30	36	36	29	26	38	32	26	28			
Southwest Plain.																																
Amoret	Maximum	12	10	42	42	35	53	55	43	25	35	41	34	44	42	47	60	52	43	48	48	54	75	67	42	63	62	38	43			
	Minimum	-9	-12	4	-1	4	23	25	15	7	16	8	12	23	22	22	23	37	19	27	19	24	28	25	18	29	36	23	23			
Clinton	Maximum	8	8	40	32	33	40	52	43	26	37	26	38	43	41	47	59	53	41	54	45	59	70	64	45	71	64	39	43			
	Minimum	7	-10	5	1	-3	15	30	24	10	19	9	11	27	23	25	25	35	21	29	23	27	28	28	21	29	37	24	23			
Harrisonville §§	Maximum	5	11	42	9	30	50	48	40	25	33	24	38	43	38	44	58	50	36	49	38	51	74	38	42	67	43	37	42			
	Minimum	-11	-10	-10	9	0	5	30	35	10	16	7	8	9	22	20	12	22	18	19	18	18	23	27	17	16	34	22	18			
Lamar §§	Maximum	13	21	48	14	36	50	65	42	31	39	28	44	49	51	56	59	52	60	55	60	75	38	54	72	57	40	....	45			
	Minimum	-7	-8	12	8	3	8	32	29	9	14	12	13	15	34	25	34	24	45	48	45	44	37	24	28	50	26	27	....			
Lamonte	Maximum	12	6	38	36	29	48	50	37	27	30	24	35	44	37	41	58	50	35	50	46	55	68	68	40	70	60	34	43			
	Minimum	-8	-12	3	-2	0	12	20	20	6	15	5	6	26	20	22	20	32	20	23	19	24	25	25	15	28	32	21	19			
Marshall	Maximum	16	4	36	34	25	49	49	42	24	29	26	33	47	41	37	58	49	34	50	40	55	68	66	38	68	60	39	46			
	Minimum	-9	-13	0	-8	1	13	29	20	5	19	5	7	24	21	20	21	32	20	28	16	19	23	34	17	26	35	21	19			
Warrensburg	Maximum	9	7	40	38	31	53	52	38	27	31	24	38	44	37	43	59	50	35	51	36	54	66	62	44	69	62	36	42			
	Minimum	-8	-12	4	-1	4	22	32	20	7	18	6	9	28	20	25	26	28	20	30	19	24	24	26	18	28	35	22	19			
Warsaw	Maximum	15	8	41	40	31	53	51	42	28	37	28	40	44	42	46	59	55	43	56	45	58	70	60	44	71	65	40	45			
	Minimum	-6	-12	4	1	4	12	25	25	8	16	8	9	28	25	20	19	41	25	32	24	25	24	29	18	25	39	25	25			
Northwest Plateau.																																
Avalon	Maximum	2	5	34	34	26	50	50	45	24	30	28	22	50	40	34	57	55	40	44	35	51	66	60	40	67	60	39	45			
	Minimum	-10	-15	0	-2	0	25	30	18	4	18	4	8	18	20	30	28	30	30	28	15	25	30	22	17	30	35	28	20			
Grant City	Maximum	6	2	37	33	32	41	52	48	30	25	15	31	44	40	35	58	50	30	36	30	42	64	56	44	64	59	35	40			
	Minimum	-16	-20	-4	-8	-8	15	29	20	0	12	0	11	20	17	23	24	21	21	10	7	12	19	13	17	23	25	14	17			
Kansas City	Maximum	1	8	40	40	31	51	52	41	25	31	21	37	48	38	38	59	49	32	45	32	50	73	61	40	66	67	35	40			
	Minimum	-10	-12	8	-1	7	30	35	15	8	18	6	11	27	22	27	30	23	18	20	15	26	27	23	23	32	26	20	19			
Kidder §§	Maximum	2	9	42	6	28	51	55	34	23	32	21	33	48	40	35	62	45	32	44	27	51	72	26	39	69	44	37	42			
	Minimum	14	-17	9	9	0	27	31	33	2	18	2	8	23	17	23	25	38	16	30	12	23	22	25	16	29	33	19	11			
Lexington §§	Maximum	4	5	37	7	27	47	50	32	26	30	24	35	50	37	37	59	50	33	48	32	54	68	38	39	69	44	40	43			
	Minimum	-10	-13	2	3	-1	18	32	30	6	17	5	9	30	20	25	27	42	20	27	16	23	24	29	17	26	39	21	18			
Maryville §§	Maximum	-6	7	37	5	28	40	53	22	20	23	19	33	44	36	34	59	35	30	33	30	42	66	33	38	65	32	38	42			
	Minimum	-17	21	-21	-7	-10	-1	10	20	0	0	-1	-1	9	15	16	24	24	10	10	6	7	18	11	11	13	24	14	14			
Oregon	Maximum	4	1	39	34	25	44	51	40	22	24	19	36	43	36	39	58	50	30	35	37	40	66	66	37	62	54	35	40			
	Minimum	17	18	0	-8	2	19	28	14	2	15	1	11	24	15	22	24	22	12	23	10	20	21	13	16	27	23	18	18			
St. Joseph	Maximum	-3	6	40	38	30	45	53	38	22	27	22	35	45	38	38	59	47	33	37	29	45	70	56	40	67	55	37	42			
	Minimum	-15	-16	6	-6	5	28	32	11	5	15	4	11	27	18	25	26	21	16	17	13	25	24	17	19	28	25	20	21			
Trenton	Maximum	8	3	33	32	21	45	48	46	21	24	21	30	44	39	36	54	53	30	39	30	44	59	57	34	61	55	34	38			
	Minimum	12	-17	-2	6	1	15	30	16	3	16	2	8	21	17	27	23	30	16	18	11	24	23	17	17	26	31	18	19			

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is cha
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

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MAY 10 1917

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

MARCH, 1917

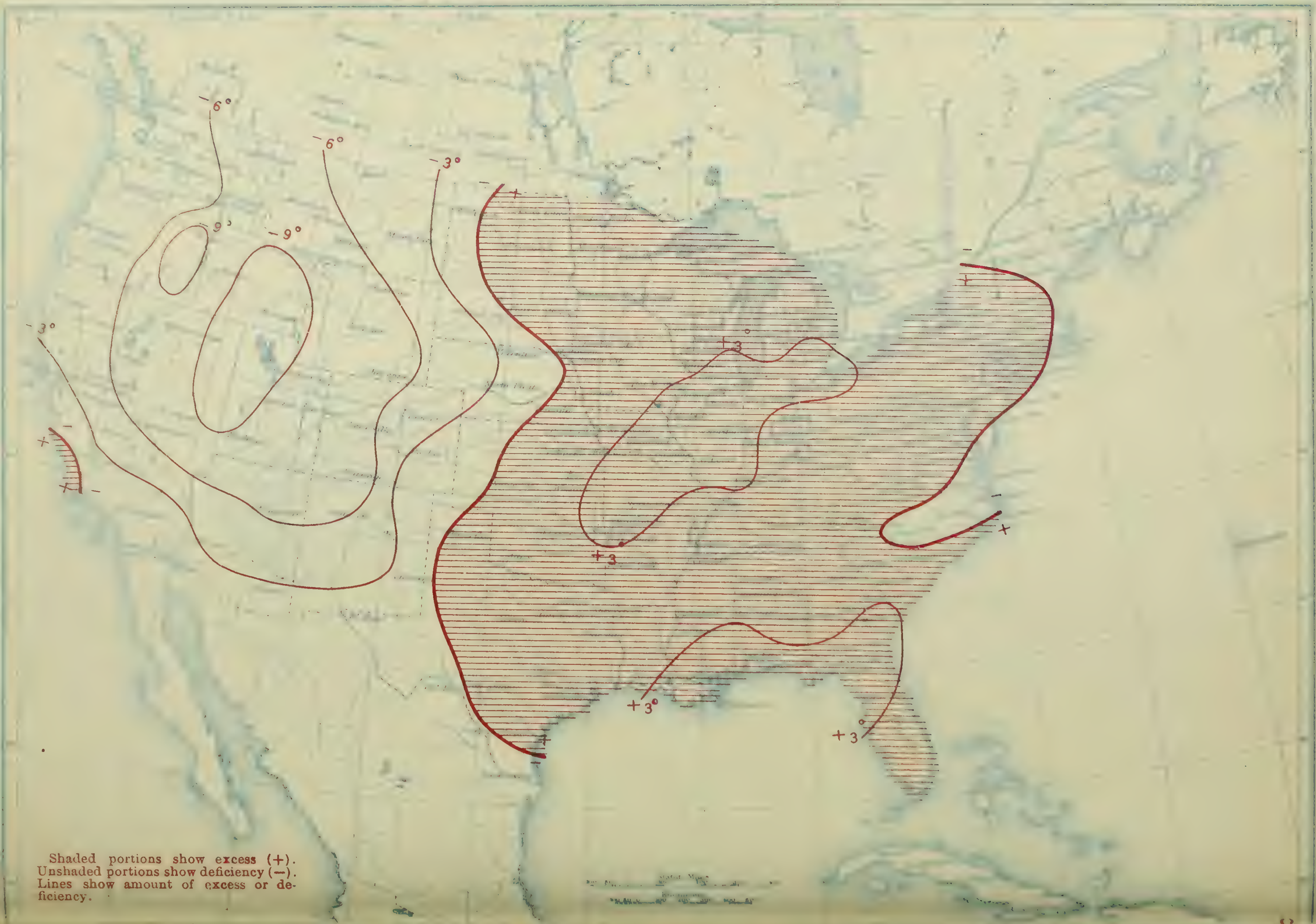
BY

GEORGE REEDER
METEOROLOGIST

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
APRIL 27, 1917.

Departure of the Mean Temperature from the Normal, March, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

L. XXI. COLUMBIA, MO., MARCH, 1917. No. 3.

GENERAL SUMMARY.

March, 1917, was unusually windy but the month, as a ole, was bright, moderate and generally favorable for out- or work. Much needed moisture, falling in most cases as ntle to moderate rains, occurred at regular intervals, the total the month approximating the normal. More moisture was ded at the close of the month, however, as the entire winter l been abnormally dry.

Wheat, that escaped winter killing which was quite severe, proved generally and in some localities the improvement was orted to be marked, which, doubtless, was in a comparative se, as most farmers were surprised that this crop survived at . Pastures and meadows began to show some little growth. Much plowing was done; and oat seeding was practically npleted. Apples are uninjured; and a fair crop of peaches expected in a few of the southeastern counties, especially in Koshkonong district. Strawberry plants in the southwest- counties were somewhat injured by the winter drought. re truck will be planted than usual. There is general com- int of high prices and scarcity of seeds, and lack of help.

TEMPERATURE.

The monthly mean temperature, as based upon the reports 68 stations, was 45.2°. The mean departure from the nor- l for 63 stations having 10 or more years' record was plus °. The excess was quite well distributed but was less rked in the Ozark Plateau than in the other divisions. The t week was cold, but the remainder of the month was a suc- sion of moderately warm and cold spells, the warm spells ng effective for a longer time. For the State as a whole, nperatures reached 32° or lower on 15 days; in the extreme theastern lowlands there were only 4 days with 32° or ver, but in the extreme northern counties there were from to 26 days with freezing temperature. Zero temperatures urred at 12 stations on the 5th; at 6 stations north of the ssouri River, 2 in the Ozark Plateau, and 4 in the southwest- lowlands, that division being the coldest part of the State on t day. Day temperatures were from 80° to 86° generally the 30th, and 31st.

PRECIPITATION.

The average precipitation, 83 stations reporting, was 2.91 ches. The departure from the normal for 75 stations having or more years' record was minus 0.47 inch. The total nthly fall was slightly above normal in the northeastern and thwestern plains, but it was below the normal in the three her divisions, the deficiency being most marked in the Ozark ateau and the southeastern lowlands. There was some snow ring the first week; but most of the precipitation fell as ntle rains, the most general on the 13th, although at many tions on the 12th, and on the 23d. The heaviest fell on the th and was the first rain to supply much needed moisture in any weeks. The greatest local monthly fall was 6.22 inches, Cassville, and the least monthly amount was 0.74 inch, at ermann. The greatest amount recorded in any 24 consecu- e hours was 4.08 inches, at Louisiana on the 13th. The owfall of the month was about 50 per cent of the normal ount, and practically all of it fell on the 2d and 3d.

The average number of days with 0.01 inch or more pre- itation was 7.

WIND.

The prevailing winds were from the south. The month was windy; the hourly velocity, as based upon reports of 8 stations equipped with anemometers, was about 35 per cent above the average. Strong gales obtained on the 7th, 10th, and 16th.

SUNSHINE AND CLOUDINESS.

There were 15 clear days during the month. The percentage of possible sunshine was 67, or about 12 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fog, dense—21st. Hail—11th, 13th, and 22d. Halos, lunar—1st, 3d, 5th, and 8th. Halos, solar—1st, 3d, 4th, 5th, 9th, 19th, 24th, and 28th. Thunderstorms—11th, 12th, 13th, 15th, 16th, 20th, 22d, 23d, 26th, and 31st.

ERRATA FOR FEBRUARY, 1917.

Clinton: mean maximum temperature should be 43.7. Fulton: the monthly mean temperature should be 29.4. Maryville: mean maximum temperature should be 33.5.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.03	69	......	251	68	9,382	12.6	40	sw.	16
Hannibal	30.03	72	......	......	......	10,126	13.6	46	sw.	7
Kansas City	30.01	66	49	256	69	11,866	15.9	47	nw.	7
St. Joseph	30.01	69	43	268	72	9,627	12.9	48	nw.	7
St. Louis	30.04	73	62	231	62	14,241	19.1	52	sw.	10
Springfield	30.04	71	54	232	62	11,571	15.6	48	se.	15
Cairo, Ill	30.07	72	62	......	......	10,342	13.9	43	n.	4
Keokuk, Iowa	30.03	72	53	232	71	8,976	12.1	40	sw.	16

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	38.5	−4.8	90	1	4.02	+1.11	......	......	10	....	....	....
1889	44.3	+1.0	84	13	1.98	−0.93	......	......	5	....	....	....
1890	37.3	−6.0	76	−11	2.61	−0.30	......	5.7	8	....	....	....
1891	36.6	−6.7	78	−11	3.01	+0.10	......	7.1	10	....	....	....
1892	38.9	−4.4	87	5	3.11	+0.20	......	......	8	8	10	13
1893	40.5	−2.8	86	1	2.86	−0.05	2.15	3.2	7	11	10	10
1894	47.7	+4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.4	−0.9	98	0	2.14	−0.77	3.00	4.4	9	14	7	10
1896	39.2	−3.9	82	2	2.05	−0.86	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	−5	6.07	+3.16	4.10	1.0	12	9	9	13
1898	44.7	+1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.4	−4.1	78	−8	2.93	+0.02	4.39	8.9	6	9	11	11
1900	40.4	−1.9	88	−4	1.48	−1.43	3.41	0.2	6	15	9	7
1901	42.7	−0.6	85	−1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.60	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	−8.7	75	−5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	−0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	−0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	−2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	−1.06	2.00	1.4	6	16	8	7
1912	35.2	−8.1	89	−4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	−3.7	84	−12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	−1.3	87	−2	2.75	−0.41	3.01	4.7	8	13	7	11
1915	36.4	−8.1	70	6	1.50	−1.74	1.85	7.9	6	7	8	16
1916	47.0	+1.3	95	−2	2.53	−0.65	4.25	3.1	7	14	8	9
1917	45.2	+1.7	86	−7	2.91	−0.42	4.08	1.5	7	15	7	9

Climatological data for March, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. of 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Boonville	Cooper	621	39	....	....	....	....	....	....	....	3.92	+0.88	1.96	....	8	22	4	5	s.	C. Randecker.
Brunswick	Chariton	652	36	43.0	+1.9	83	30	5	5†	54	2.78	+0.36	1.06	3.0	6	15	3	13	n.	Louis Benecke.
Clifton Hill	Randolph	731	....	44.1	+3.5	83	30	3	5	42	3.16	+0.51	2.08	3.2	5	14	14	3	....	L. S. Harlan.
Columbia	Boone	784	26	44.4	+3.0	82	30	3	5	36	3.52	+0.49	1.78	2.5	10	10	11	10	s.	U. S. Weather Bureau.
Fayette	Howard	725	31	42.6	+0.9	82	30	−3	5	47	4.02	+1.36	2.47	2.5	6	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	12	44.8	+1.0	83	31	4	5	43	3.46	+0.48	2.07	0.4	9	21	5	5	nw.	Dr. O. M. Weigle.
Glencoe	St. Louis	479	....	....	....	....	....	....	....	....	1.47	....	0.95	0.5	4	15	7	9	s.	Vint R. Neel.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	1.80	−0.60	0.92	0.1	7	5	16	10	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	43.0	+1.4	80	30	8	4	40	3.95	+1.19	2.85	1.8	11	12	11	8	sw.	U. S. Weather Bureau.
Hermann	Gasconade	519	42	....	....	....	....	....	....	....	2.28	−0.72	0.74	2.0	10	12	6	13	e.	C. T. Mauslund.
Jefferson City	Cole	557	30	44.6	+1.9	83	31	4	5	41	2.26	+0.23	1.15	3.0	7	20	3	8	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	....	....	....	....	....	....	....	3.31	....	1.55	3.0	5	....	....	....	....	J. T. Dewey, M. D.
Louisiana	Pike	469	38	44.8	+2.5	82	31	8	4	40	5.72	+3.10	4.08	1.5	7	19	8	4	w.	J. T. Farrell
Macon	Macon	875	18	40.3	−2.0	81	30	4	5	52	4.25	+1.76	1.96	1.5	6	10	10	11	sw.	John A. Cook.
Mexico	Audrain	797	38	43.6	+2.3	86	31	2	5	40	4.05	+1.35	2.00	3.0	6	15	16	9	w.	R. M. Llewellyn.
Oakfield	Franklin	500	24	46.4	+1.9	84	31	7	5	36	2.92	−0.78	1.31	1.5	5	11	9	11	sw.	E. L. Steines.
Pacific	do.	467	....	....	....	....	....	....	....	....	1.75	....	0.87	....	6	18	3	10	....	Russell C. Dougherty
Palmyra	Marion	652	4	40.8	+1.4	79	30†	6	4†	45	3.05	−0.05	1.25	2.5	7	17	3	11	w.	W. B. Markell.
St. Catherine	Linn	850	3	42.2	....	79	30	0	5	40	2.02	....	1.00	0.5	6	17	9	5	nw.	L. D. Baker.
St. Charles	St. Charles	456	38	46.2	+2.7	83	31	10	5	39	1.83	−1.36	1.08	0.5	6	9	11	11	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	46.6	+3.1	80	31	14	4	31	1.80	−1.63	0.99	0.3	12	10	11	10	s.	U. S. Weather Bureau.
St. Louis (2)	do.	578	4	46.0	....	80	31	14	4†	31	1.96	....	0.95	0.3	13	14	10	7	s.	St. Louis University.
Shelbina	Shelby	779	....	....	....	....	....	....	....	....	3.01	+0.39	2.50	2.6	5	....	....	....	....	S. G. Parsons.
Steffenville	Lewis	650	23	41.8	+0.4	80	30	1	5	43	4.33	+1.46	2.30	1.0	6	9	16	6	s.	Frank Hall.
Union	Franklin	568	....	....	....	....	....	....	....	....	1.67	....	0.90	1.2	6	11	9	11	sw.	J. Wm. Keller.
Unionville	Putnam	1,072	23	37.5	+0.1	76	30	−1	5	51	2.12	−0.13	1.45	T.	6	20	4	7	n.	Geo. W. Davis.
Valley Park	St. Louis	430	....	....	....	....	....	....	....	....	2.11	....	1.15	0.7	9	18	3	10	s.	H. J. Lucksinger.
Warrenton	Warren	865	25	43.6	+2.0	82	31	7	5	49	3.59	+0.30	1.65	0.8	8	7	12	12	sw.	Prof. J. H. Frick.
Section means and extremes		....	....	43.5	+1.6	86	31	−3	5	54	2.93	+0.42	4.08	1.5	7	14	9	8	s.	
Southeast Lowlands.																				
Cape Girardeau	Cape Girardeau	346	10	....	....	....	....	....	....	....	3.63	+0.28	0.90	T.	13	16	3	12	n.	D. L. Albert.
Cardwell	Dunklin	270	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	F. E. Tate.
Caruthersville	Pemiscott	220	25	52.0	+1.3	82	31	12	5	34	4.63	+0.24	1.07	1.0	11	17	3	11	e.	H. E. Averill.
Doniphan	Ripley	344	11	50.2	+1.0	78	26†	13	5	39	2.60	−1.32	0.85	T.	8	16	3	12	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	48.8	+2.0	79	26	14	15	40	2.13	−2.69	1.05	T.	8	9	6	16	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	48.6	+1.8	85	30	11	5	53	1.60	−3.14	0.80	0.0	4	13	8	10	s.	Dr. A. F. Hendricks.
New Madrid	New Madrid	285	22	....	....	....	....	....	....	....	4.74	−0.98	1.00	T.	15	15	3	13	se.	Miss Josie Smith.
Patton (near)	Bollinger	500	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	George F. Ellis.
Poplar Bluff	Butler	339	12	47.0	−1.4	79	30	12	5	47	2.53	−2.84	0.72	0.1	10	16	4	11	....	Miss Belle Kinne.
Sikeston	Scott	328	15	50.8	+2.6	80	31	12	5	39	3.27	−2.15	0.85	1.0	12	7	14	10	s.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	49.4	+2.4	78	31	16	5	27	3.60	−0.42	0.76	2.8	12	12	8	11	s.	U. S. Weather Bureau.
Section means and extremes		....	....	49.5	+1.4	85	30	11	5	53	3.19	−1.45	1.07	0.5	10	13	6	12	s.	
Ozark Plateau.																				
Arlington	Phelps	767	14	....	....	....	....	....	....	....	2.33	−0.61	0.85	5.0	7	17	3	11	se.	G. V. Randolph.
Birchtree	Shannon	1,078	22	47.4	+0.2	78	11	7	5	39	1.27	−3.36	0.55	T.	5	23	6	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	28	45.6	0.0	76	30	4	5	43	2.25	−0.83	0.85	3.0	7	16	11	4	sw.	A. C. Fink.
Cassville	Barry	1,500	5	48.4	....	80	31	10	5	46	6.22	+2.08	2.10	1.0	8	18	6	7	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,126	5	40.7[i]	−3.0	74	28	1	5	41	....	....	....	....	....	19[i]	0[i]	3[i]	s.	Roy W. Reed.
Dean	McDonald	1,000	17	51.2	+2.6	83	25†	16	4	44	2.42	−1.10	0.90	T.	6	19	4	8	s.	H. E. Dean.
Eldon	Miller	934	15	43.2	+0.2	79	31	0	5	40	2.19	−1.02	1.10	3.0	6	10	13	8	nw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	48.8	....	78	30	8	5	40	3.58	+0.63	1.20	0.0	5	20	6	5	s.	R. C. Walton.
Gano	Dent	1,250	12	45.9	−0.8	82	31	2	5	37	2.89	−0.91	1.02	2.0	8	16	8	7	s.	A. C. Leach.
Goodland	Iron	1,000	11	46.0	+1.4	78	31	1	5	48	2.28	−2.24	0.94	0.8	5	15	10	6	s.	F. M. Adams.
Hollister	Taney	735	7	49.0	+0.6	78	12†	12	5	34	1.40	−2.61	0.60	1.0	4	16	0	15	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	47.4	+1.3	80	31	1	5	39	1.86	−2.80	0.75	3.6	6	14	5	12	s.	R. F. Harmon.
Ironton	Iron	925	38	45.8	+1.2	79	31	5	5	44	2.74	−1.39	0.92	0.8	10	13	10	8	sw.	W. H. Delano.
Koshkonong	Oregon	958	15	49.7	+0.3	79	11	11	5	35	1.72	−2.38	0.95	1.0	6	13	4	14	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	45.4	+0.2	81	31	−1	5	52	2.29	−1.34	1.16	3.0	9	17	5	9	s.	Leonard E. Dickerson.
Lockwood	Dade	1,078	21	48.8	+1.7	82	30	9	5	41	2.71	+0.35	1.66	1.0	6	20	2	9	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	43.6	−2.5	80	31	2	5	45	2.09	−2.63	0.56	2.0	8	12	3	16	s.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	49.2	+3.8	82	31	5	5	42	1.13	−2.55	0.38	1.5	7	19	4	8	sw.	J. R. White & Son.
Neosho	Newton	1,011	33	49.9	+2.2	83	31	11	5	41	1.84	−1.70	1.15	0.5	6	19	6	6	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	44.8	+0.5	82	31	3	5†	53	2.00	−1.52	0.75	3.5	7	12	14	5	se.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	47.0	+3.5	80	31	10	5	36	2.31	−1.76	0.93	4.4	12	18	5	8	s.	U. S. Weather Bureau.
Steelville	Crawford	755	15	....	....	....	....	....	....	....	2.69	+0.70	1.36	0.8	6	19	3	9	sw.	Thomas D. Slater.
Section means and extremes		....	....	46.9	+0.7	83	25†	−1	5	53	2.39	−1.29	2.10	1.8	7	17	6	8	s.	
Southwest Plain.																				
Amoret	Bates	831	7	46.3	+4.0	82	30	2	5	46	3.02	+0.52	1.15	4.0	7	14	6	11	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	46.8[a]	+2.9	83	30	7	5	46	1.97	−1.17	1.15	2.0	8	15	11	5	nw.	W. G. Bigelow.
Clinton	Henry	765	29	46.5	+3.2	85	30	4	5	45	3.42	+0.65	2.25	2.5	5	13	11	7	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	42.0	+1.5	82	30	−3	5	56[b]	3.19	+0.66	1.28	3.0	5	11	3	17	w.	A. J. Sharp.
Lamar	Barton	980	35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Dick B. Houston.
Lamonte	Pettis	863	27	44.3	+1.2	83	30	−7	5	47	3.25	+0.81	1.80	2.0	7	18	5	8	nw.	J. Ed. Hall.
Marshall	Saline	779	25	44.2[b]	+2.4	83	30	−3	5	42	4.31	+1.75	2.10	4.0	7	19[b]	0[b]	10[b]	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	47.8	+4.2	81	30	10	5	42	2.60	−0.34	1.47	3.0	6	19	7	5	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	45.6	+2.5	83	30	5	5	44	3.30	+0.77	2.00	2.0	8	15	11	5	nw.	Geo. H. Collins.
Warsaw	Benton	687	11	46.4	+0.2	84	30	0	5	49	4.56	+1.46	1.35	4.5	9	14	12	5	w.	J. R. Smith, M. D.
Waverly	Lafayette	642	1	....	....	....	....	....	....	....	2.74	....	0.87	....	6	18	1	12	sw.	John W. Cauthorn.
Section means and extremes		....	....	45.5	+2.5	85	30	−7	5	56	3.24	+0.57	2.25	3.0	7	16	7	8	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	45.7	+4.4	82	30	4	5	41	2.63	−0.11	1.15	1.5	6	19	9	3	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	42.2	+3.3	86	30	−5	5	45	1.31	−0.90	0.90	T.	4	10	15	6	nw.	M. H. Moulton.
Chillicothe	Livingston	779	1	....	....	....	....	....	....	....	1.87	−0.92	0.84	....	5	19[a]	0[a]	11	....	Hocey O. Dupy.
Conception	Nodaway	982	31	41.3	+2.9	83	30	0	4	45	0.76	−1.03	0.57	T.	5	8	15	8	sw.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	16	....	....	....	....	....	....	....	2.89	+0.26	1.30	0.3	5	17	4	10	nw.	Robert R. Wynne, Jr.
Grant City	Worth	1,134	23	40.3	+0.4	82	30	1	4†	42	1.00	−0.98	0.87	T.	3	21	3	7	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	44.2	+3.4	81	30	8	4	39	2.89	+0.07	1.32	3.2	8	18	5	8	n.	U. S. Weather Bureau.
Kidder	Caldwell	1,020	25	43.6	+3.2	83	30	4	4	41	2.16	−0.04	0.80	1.0	6	16	9	6	se.	J. F. Sharp.
Lexington	Lafayette	688	31	43.8	+1.4	82	30	4	5	41	2.69	+0.42	1.38	2.0	6	14	0	17	w.	J. W. Keithley.
Liberty	Clay	864	27	47.1[f]	+5.3	85	30	....	....	47	2.12	−0.30	1.25	3.5	4	14[f]	6[f]	5[f]	nw.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	38.0	+1.7	84	30	0	4†	57	1.22	−0.69	0.53	0.5	3	20	2	9	n.	J. R. Brink.
Oregon	Holt	1,048	60	41.0	+2.1	81	30	3	4	40	1.06	−0.98	0.98	T.	2	16	7	8	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	42.6	....	82	30	7	4	43	1.48	−0.51	1.03	0.1	6	14	11	6	nw.	U. S. Weather Bureau.
Tarkio	Atchison	976	4	41.2	+2.4	81	30	4	4†	41	1.17	−0.62	0.77	0.0	3	23	0	8	nw.	John F. Frazier.
Trenton	Grundy	822	21	42.0	+1.8	80	31	1	4	37	3.09	+0.88	1.10	T.	5	15	9	7	nw.	W. H. Estes.
Section means and extremes		....	....	42.6	+2.7	86	30	−5	5	57	1.89	−0.36	1.38	0.9	5	16	7	8	nw.	
State means and extremes		....	....	45.2	+1.7	86	30†	−7	5	57	2.91	0.42	1.08	1.5	7	15	7	9	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Figures or letters, a, b, c, appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5.

Daily precipitation for March, 1917.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																		
ille ‖	Missouri			.15	T.			.05				.08		1.96	.76		.16					.11		.65				T.					3.92
wick	Grand			.15				T.						.12	1.06		.67					.04		.74				T.					2.78
Hill	Chariton			.10				.01					.66	2.08			.31																3.16
aa***	Missouri		.06	.06			T.					T.	.97	.81		.04	.10				.21		T.	.80			.02					.45	3.52
	do			.25			T.							2.47			.20				.14			.96									4.02
	do		T.	.04				.01					.09	2.07			.20				.30	.05		.62				.08					3.46
	Meramec			T	T.						T.		.25	.95	.03		.24											T.					1.47
	Mississippi			.01				.04				.30	.08	.84			.45							.38									1.80
bal***	do		T.	.07	T.		.01	.01				.07	.89	2.01		.04	.20	T.			.12			.52								.01	3.95
	Missouri			.09	T.			.01					T.	.74	.35		.06	.01				.44	.01	.50	T.			.97					2.28
on City	do			.08				.05						1.15	.08		.30					.20		.40									2.26
ville	Chariton			.30			T.						.20	1.55			.44						82										3.31
	Mississippi			.03				.06				.11		4.08					T.		.22			1.15				.07					5.72
	Chariton			.09				.01						.60	1.96		.66							.93									4.25
	Mississippi			.23				T.						2.00	1.23		.18					.20		.21									4.05
d	Meramec		T.	.05								T.	.09	1.05			.42							T.			T.					1.31	2.92
	do			.05									.43	.87	T.		.23					.01						.13					1 72
	Mississippi			.25				.11						1.25	.35		.55					.10		.44									3.05
erine	Grand			05				T.				.15	.03	1.00			.22							.57									2.02
arles.	Missouri			.05									T.	1.08			.13				T.			.38				.09				.10	1.83
rs (1)***	Mississippi		.01	.02	T.		T.					.05	.04	.97		.12	.10	T.			.02		T.	.14			.02	.04				.27	1.80
is (2)	do		.01	.02		T.		.01				.03	.11	.95		.18	.10				.03						.02	.04				.35	1.96
a.	do			.26										**2.50			.20				05												3.01
ille	do			.07	T.							.33	.15	2 30			.48	T.			T.			.90			T.						4.23
	Meramec			.06									.24	.90			.37							.02				.08					1.67
ville ‖	Grand			T.								.06		.50	.95		.40							.15				T.					2.12
Park ‖	Meramec			.01	T.			T.					.30	1.15	.09		.35	.06				.01		.05	.04			.11					2.11
ton ‖	Mississippi			.06				T.						1.65	.50		.24	.01				.60		.49				.04					3.59
east Lowlands.																																		
irardeau‖ ‖	Mississippi			.30	.20	.05		.15				.05	.60	.15	.55		.90					.08			.40			.10					3.63
ersville	do	T.	1.07	.20	.13			.12			.75	T.		T.	T.	T.	.55	.10			.10	1.00	.59	.03			T.	.09					4.63
an	Black		.37	.10				.10			.15		T.	.63			.85				T.	.20	T.	.20									2.60
n	Mississippi		.05		T.						.11		.55			1.05	.13				.05			.16			.03						2.13
Hill	do			T.									.60		.05		.80								.15								1.60
ladrid	do	.45	.67	.65	.10	.15		.13				.52	.02		.15		1.00	.05				.55		.06	36			.01					4.74
(near)	do											2.70									.70											.20	3.60
Bluff ‖ ‖	Black		T.	.33	.01			.07				.23	.52	T.	.17		.72	.11				.10		T.	.27			T.					2.53
on	Mississippi	.27	.51	.11							.23	T.	.37	.02	.07		.85	T.			.02	.33	.01	.34	T.			T.					3.27
ill ***	do	T.	.42	.01	.05			.21			.43	.41	.07	T.		.26	.45				.28	.25		.76								T.	3.60
k Plateau.																																		
ton	Gasconade		.06	.12									.48	.85	.20		.50											.12					2.33
ree	Black			.08									19	.33			.55							.12									1.27
r	Osage		.10	.20										.85		.28					.49		.23	.10									2.25
ile	White			.10	T.							.25	.01	1.33			.65							1.75				.03				2.10	6.22
	Neosho		.24	T.				.13						.59		.26								.90								.31	2.42
	Osage			.15										1.10			.31				.12			.41				.10					2.19
ity	Black										T.	1.20	.36	.85			.47						T.	.70									3.58
	Meramec		.20	.04								.05	1.02	.87			.58							.05				.08					2.89
und	Black			.08									.94	.85			.44											.05					2.36
er	White			.10				.20						.60		.50																	1 40
on	Gasconade		.10	.12	.14	.14					T.	.61	T.	T.			.75															T.	1.86
n	Mississippi			.10	.05							.02	.82	.27	.65		.55				T.	T.		.03	.20			.05				T.	2.74
nong	Black		.16	.10							.04			.38			.95							.09									1.72
on	Osage		.20	.10				.01				.02	.20	1.16	.26		.26											.02					2.29
ood	do		.04	.06				.22					T.	1.66			.48				.25												2.71
ain Grove	White		.06	.09	T.		T.	.30					.27	.56	.16		.54							.11									2.09
rnon	Neosho		.10					.07						.38			.16						.12					.02				.28	1.13
	do		.22	.10				.10				T.	T.	1.15		.06	.21							T.								T.	1.84
	Meramec		.10	.17									.39	.75	.10		.37											.12					2.00
eld ***	White		.39	.09	T.		.09				T.	.01	.02	.93		.10	T.				.02		.01	.01			.05	T.				.59	2 31
lle	Meramec		T.	.12									.63	1.36	.09		.44					T.	T.					.05					2.69
west Plain.																																		
	Osage			.55										1.07		.07	.05				.10			1.15				.03					3.02
on City	do		T.	.18				.06					.13	1.15		T.	.06				.09	T.		.29				.01					1.97
	do			.25									.35	2.25			.15							.42									3.42
onville ‖	do			.21										.65	1.00							.05		1.28									3.19
	Neosho			.10				.12						.95			.25				.11		T.					T					1.53
te	Missouri		T.	.13				T.				.15	.30	1.80		T.	.15				.05			.67									3.25
all	do		T.	.40			T.					.13	.16	1.10		T.	.24				.22			1.06			T.	T.				T.	4.31
a	Osage			.30									1.47	.49			.10				.12			12									2.60
sburg	Missouri		.12	.14			T.					.24	.35	1.65		T.	.14				.07			.59									3.30
	Osage		.24	.40				.10					1.35	1.10		T.	.15				.06			1.08			.08					T.	4.56
y	Missouri			.28										.44	.87		.47					.04		.64									2.74
west Plateau.																																		
	Grand				.10							.03		1.00		.35					T.		90	.25									2.63
y	do			T.									.05	.90			.30	T.						.06			T.						1.31
ther	do			.03										.24	.84		.37							.39									1.87
tion	Missouri			T.							T.	.02	.03	.57		T.	.11						T.	.03			T.						0.76
n	Grand			.03								1.01	T.	1.30		T.	.25							.30									2.89
ity	do												.05	.87				T.						.08			T.						1.00
ity***	Missouri		.15	.19									.38	.94		.13	.04				.02		1.04										2.89
	Grand			.10										.80	.45		.26					.03		.52									2.16
ton	Missouri			.20										.08	1.38		.25					.01		.77									2.69
	do			.30									T.	1.25		T.	.11				T.			.46									2.12
	do			T.										.53	.52		.17											T.					1.22
	do			T.										.98			.08	T.					T.				T.						1.06
ph***	Missouri			.01							T.		.14	.89		.10	.04	T.					.30				T.						1.48
	do												.38	.77													.02						1.17
n	Grand		T.								.91		1.10	.63		.29	T.	T.						.16									3.09

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the l observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. lar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate fall not recorded.

Daily Evaporation (inches) and Wind Movement (miles) for March, 1917, at Columbia, Mo.

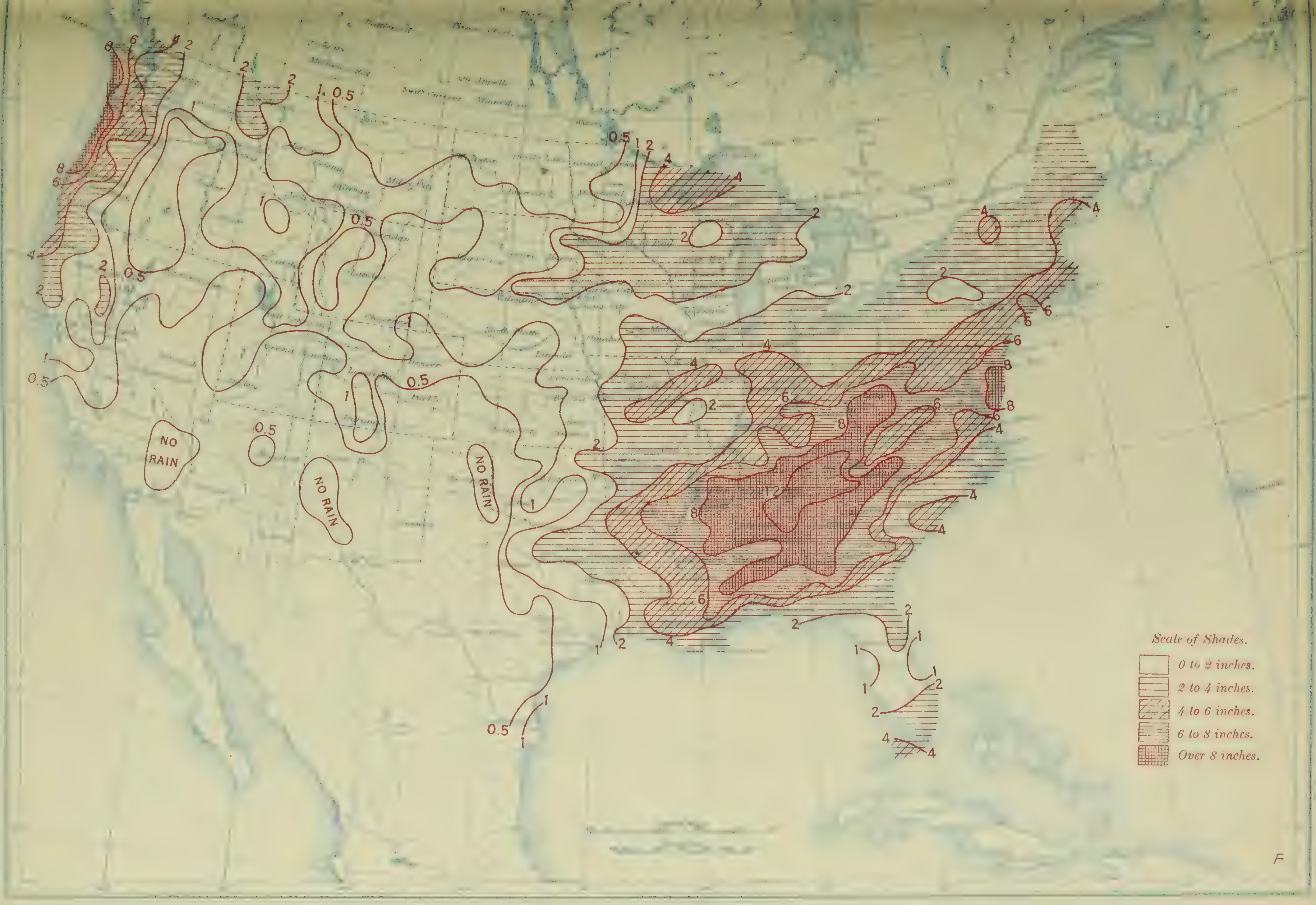
Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mo.
vaporation	.103	.129	.092	*	*	*	.123	.053	085	130	*	.178	138	.045	.046	.090	.169	.016	.127	.192	.002	098	225	.138	186	.195	133	.133	.200	.160	.209	3.395
wind movement	84	73	[illegible]	59	62	106	102	111	60	58	*	193	92	105	56	92	159	114	71	83	43	37	72	79	66	60	117	74	86	44	89	2517

otal in next following measurement. † Indicates minus (–) Observations taken at 6:45 a. m.

Daily temperatures for March, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	43	42	36	36	35	59	46	52	64	72	58	41	50	48	52	52	43	44	66	46	66	75	56	68	73	54	52	73	66	83	73
	Minimum	27	25	25	9	5	5	34	28	25	32	38	35	35	33	28	31	31	25	29	31	30	38	41	33	43	37	30	32	35	39	53
Columbia	Maximum	36	34	31	22	38	57	50	50	64	69	54	44	54	45	54	60	41	41	65	49	64	71	64	66	75	59	50	69	62	82	80
	Minimum	24	29	20	8	3	33	36	32	30	52	45	39	36	33	29	34	30	26	31	38	35	44	41	37	47	38	32	38	39	46	50
Fayette	Maximum	36	35	30	21	35	58	46	50	72	68	56	47	44	46	53	58	40	42	67	42	67	72	54	66	72	51	50	70	63	82	77
	Minimum	22	25	17	7	−3	32	36	29	25	45	33	33	32	32	26	33	30	28	28	35	33	41	35	34	46	37	30	35	39	46	47
Hannibal	Maximum	34	36	33	23	34	56	49	48	57	70	62	40	54	46	51	59	43	38	65	47	61	68	62	68	72	60	48	67	61	80	78
	Minimum	23	24	19	8	12	32	35	29	23	42	38	34	35	33	29	35	28	25	29	33	31	40	39	36	49	39	32	36	39	40	48
Jefferson City §§	Maximum	38	32	32	22	39	59	50	52	66	71	55	46	61	50	60	64	42	43	67	47	61	70	55	70	69	69	52	70	64	82	83
	Minimum	25	27	26	10	4	13	38	32	27	30	47	40	38	33	29	34	32	26	28	40	36	43	44	34	43	41	32	36	40	45	54
Macon §§	Maximum	36	42	33	25	35	58	42	49	61	72	53	40	46	45	49	58	41	40	64	48	63	71	53	66	71	54	49	69	62	81	72
	Minimum	17	20	22	5	4	6	33	27	20	22	39	34	33	31	25	25	29	23	24	31	30	33	40	34	35	35	28	29	36	36	44
Mexico §§	Maximum	36	36	32	21	35	58	46	51	62	70	50	41	56	47	52	62	44	43	65	45	64	72	54	68	75	58	51	68	65	82	86
	Minimum	22	24	26	6	2	26	37	30	22	45	45	36	35	32	26	41	31	24	26	30	32	39	45	34	45	38	30	33	37	42	64
Oakfield	Maximum	40	34	34	29	37	57	50	53	62	70	70	47	67	51	55	65	45	43	63	52	61	69	65	69	75	70	50	70	65	79	84
	Minimum	24	28	26	13	7	28	41	31	29	47	45	35	37	35	28	45	32	26	27	42	39	44	43	37	49	45	32	34	42	43	59
St. Catharine	Maximum	37	38	36	27	34	56	54	50	61	71	67	44	42	44	49	53	43	38	60	56	63	71	66	64	70	63	50	69	61	79	74
	Minimum	19	20	23	5	0	30	33	25	21	45	35	33	33	30	25	36	28	23	26	29	29	40	38	29	43	36	27	33	37	42	52
St. Louis (1)	Maximum	39	37	35	25	35	55	48	52	58	67	71	44	66	50	53	65	43	41	60	52	58	65	69	65	71	71	48	68	63	76	80
	Minimum	29	30	25	14	16	28	40	35	34	46	44	37	37	37	32	39	34	29	30	43	43	45	46	41	50	40	37	37	46	48	63
Unionville §§	Maximum	36	46	36	34	36	52	39	46	58	72	48	38	36	41	52	50	36	38	50	48	61	72	52	66	62	50	54	68	70	76	64
	Minimum	14	13	14	4	−1	1	18	30	18	20	34	33	33	28	22	24	25	18	20	26	30	32	35	30	32	33	25	26	30	32	40
Warrenton §§	Maximum	36	32	31	23	37	57	46	50	63	67	67	41	66	48	55	65	42	42	65	47	62	68	59	67	75	58	48	68	63	80	82
	Minimum	22	25	26	10	7	8	32	31	28	28	53	37	35	34	27	28	31	25	26	31	38	40	46	37	40	49	32	32	37	40	61
Southeast Lowlands.																																
Caruthersville	Maximum	45	40	38	33	38	56	60	60	68	58	78	73	75	71	61	65	61	55	58	60	65	62	74	68	73	80	74	66	71	80	82
	Minimum	36	33	32	22	12	30	45	36	36	47	50	53	55	39	40	47	35	34	34	45	50	48	54	39	44	54	40	35	42	48	62
Doniphan	Maximum	44	44	36	32	38	55	54	60	65	60	77	73	76	65	59	68	65	52	60	60	67	68	75	68	71	78	64	66	72	78	78
	Minimum	34	32	31	24	13	28	44	30	26	48	50	47	47	36	33	46	34	31	28	41	49	44	54	34	43	50	32	28	42	40	64
Jackson	Maximum	50	40	35	30	34	50	55	56	60	60	75	70	72	67	60	65	65	53	57	63	67	65	75	70	70	79	65	68	66	76	78
	Minimum	32	32	30	20	14	26	40	32	24	46	47	42	44	34	30	44	35	30	27	37	45	35	50	32	42	51	36	28	45	36	60
Marble Hill	Maximum	36	33	34	37	35	40	47	50	60	60	78	74	73	72	72	65	55	50	60	67	75	62	75	72	73	76	65	60	70	85	73
	Minimum	30	30	32	21	11	30	40	22	33	44	45	42	47	40	45	35	35	30	25	41	41	35	45	34	45	53	35	25	45	32	60
Poplar Bluff §§	Maximum	45	38	37	35	38	55	57	61	61	65	77	54	75	64	62	66	52	54	60	63	68	66	74	69	72	78	56	65	72	79	77
	Minimum	33	31	32	22	12	13	32	29	26	27	47	47	46	36	35	36	35	30	28	20	38	42	45	36	37	38	37	30	31	39	30
Ozark Plateau.																																
Birchtree	Maximum	43	41	37	29	34	53	52	57	65	60	78	68	73	63	59	65	53	49	60	59	70	62	61	68	71	74	54	67	72	77	77
	Minimum	31	30	29	17	7	27	40	26	30	48	50	44	45	40	35	43	31	28	29	39	40	45	46	34	45	52	34	28	38	47	62
Cassville	Maximum	41	39	32	29	47	59	55	60	68	71	75	75	73	58	64	59	46	53	60	66	69	75	74	66	74	66	53	74	73	69	80
	Minimum	32	29	27	16	10	34	37	23	24	55	61	52	40	27	38	42	28	27	26	41	43	45	42	32	38	48	30	38	27	33	52
Eldon	Maximum	34	37	35	20	35	54	50	47	64	65	63	56	63	55	49	54	40	39	59	59	61	67	61	62	70	61	45	63	60	65	79
	Minimum	23	24	20	8	0	30	29	29	24	49	44	38	37	28	41	40	30	25	25	39	33	41	39	32	41	39	30	32	41	45	47
Fruit City	Maximum	43	38	23	31	41	55	52	58	66	60	76	58	75	65	60	66	55	50	60	65	70	63	71	70	72	75	69	70	72	78	77
	Minimum	30	30	30	17	8	39	45	30	29	50	50	44	44	34	34	45	32	29	30	34	45	48	49	32	38	35	32	33	34	47	52
Gano	Maximum	38	34	39	28	39	53	49	52	64	62	64	52	72	52	58	64	48	44	60	60	66	64	59	68	71	69	50	67	65	76	82
	Minimum	27	25	25	11	2	28	28	29	27	49	49	40	44	32	29	43	30	25	25	37	42	43	42	36	45	50	30	32	41	46	63
Hollister	Maximum	38	34	34	38	42	48	52	48	52	72	76	78	72	62	66	54	46	56	64	70	72	70	70	74	78	70	58	56	66	72	76
	Minimum	34	30	32	26	12	28	38	24	22	38	58	54	52	32	42	32	28	30	30	40	44	40	42	41	46	41	38	40	42	48	62
Ironton §§	Maximum	42	36	32	25	38	54	50	56	63	64	77	60	72	55	60	66	49	47	60	63	64	67	72	68	72	75	54	68	68	78	79
	Minimum	29	29	28	16	5	15	32	32	19	37	48	42	40	34	25	40	32	27	21	34	44	31	47	29	42	49	32	24	37	34	51
Koshkonong	Maximum	45	40	33	30	40	52	51	60	68	58	79	72	73	60	61	68	53	52	61	63	71	62	64	70	73	76	57	68	73	78	78
	Minimum	33	30	29	19	11	28	41	30	33	47	51	46	48	33	36	45	32	29	30	39	46	45	51	39	43	50	34	35	48	48	63
Lebanon §§	Maximum	40	31	30	30	40	55	45	52	65	65	70	65	70	55	61	59	46	48	60	61	68	71	60	73	75	60	50	70	68	80	81
	Minimum	28	26	25	11	−1	3	32	29	29	33	50	42	42	30	29	32	30	26	33	33	42	43	48	35	50	50	30	30	36	36	52
Mountain Grove §§	Maximum	36	31	30	22	39	52	39	55	62	61	76	55	72	49	48	61	52	47	60	59	67	63	57	67	61	63	48	62	71	77	80
	Minimum	29	27	26	14	2	7	27	28	32	35	47	45	46	29	30	35	28	24	26	30	38	38	48	34	36	43	31	28	34	40	42
Neosho	Maximum	40	39	34	30	50	63	69	60	70	71	70	75	74	57	66	60	46	50	62	67	69	78	75	68	76	75	51	69	75	80	83
	Minimum	32	28	27	16	11	37	38	23	29	56	55	52	39	26	35	43	28	26	29	45	42	46	41	34	45	44	27	32	36	51	67
Rolla §§	Maximum	41	32	30	22	40	56	48	53	65	65	71	47	73	52	60	62	44	45	64	58	69	66	65	69	75	64	50	69	70	75	82
	Minimum	28	26	26	11	3	3	32	29	28	29	51	41	40	32	31	31	31	26	28	33	40	43	47	35	35	50	31	32	37	44	42
Springfield	Maximum	38	34	31	23	46	56	48	55	66	65	68	68	70	53	59	55	41	46	61	63	68	69	66	66	74	58	49	66	70	79	80
	Minimum	29	26	23	12	10	33	36	31	36	50	49	46	36	31	39	32	29	27	34	43	42	49	40	38	45	34	30	37	45	53	61
Southwest Plain.																																
Amoret	Maximum	40	35	32	29	46	62	56	55	72	76	77	68	60	48	52	51	41	44	65	62	67	81	75	69	79	68	51	71	69	82	75
	Minimum	22	25	25	8	2	30	29	25	26	47	37	41	40	28	35	37	28	25	31	30	40	44	32	33	49	39	27	35	39	46	58
Clinton	Maximum	40	36	33	27	44	63	58	55	72	73	71	53	48	50	64	55	44	67	58	60	68	77	62	69	76	60	54	73	69	85	78
	Minimum	29	27	26	10	4	34	32	27	27	50	41	38	38	27	31	39	30	26	40	36	34	45	40	32	40	40	30	33	42	47	47
Harrisonville §§	Maximum	38	35	30	24	43	61	48	54	71	73	57	45	45	48	61	52	41	46	66	46	65	79	55	68	74	53	53	73	64	82	70
	Minimum	19	22	23	8	−3	5	34	25	26	30	38	35	36	28	29	29	30	25	25	36	32	32	38	32	33	38	28	28	35	40	48
Lamar §§	Maximum	41	35	32	27	52	64	68	69	55	75	55	67	60	61	60	61	46	51	66	61	68	80	55	70	78	65	69	85	70	83	82
	Minimum	28	28	27	14	20	40	38	40	41	22	30	46	47	32	52	44	30	24	46	46	43	48	40	33	41	45	33	61	42	30	52
Lamonte	Maximum	38	34	30	24	40	61	54	49	68	73	67	45	47	48	53	56	40	45	65	54	65	74	66	67	75	58	51	71	62	83	77
	Minimum	21	27	24	8	−7	34	36	28	22	52	38	36	36	30	28	38	30	25	30	32	31	42	39	35	44	38	30	36	40	45	55
Marshall	Maximum	40	36	31	27	37	60	56	50	....	67	66	49	51	....	54	57	42	41	66	57	64	75	69	67	73	67	50	70	64	83	77
	Minimum	22	25	25	8	−3	34	32	28	....	24	37	35	36	....	27	41	31	27	28	33	31	38	39	31	42	35	29	40	36	41	59
Warrensburg	Maximum	38	34	32	25	38	62	55	53	70	73	69	45	48	50	61	55	41	45	66	60	67	76	70	69	76	67	55	73	65	83	73
	Minimum	22	30	22	9	5	34	35	28	26	51	37	36	36	30	29	36	32	25	30	39	33	43	39	36	43	38	29	40	41	47	54
Warsaw	Maximum	40	34	33	29	43	63	58	55	69	70	68	55	56	52	63	56	44	47	67	62	69	76	71	70	77	68	53	72	68	84	80
	Minimum	26	27	27	11	0	28	37	25	20	53	43	42	39	30	30	43	32	27	25	36	32	41	40	30	42	40	30	32	37	44	61
Northwest Plateau.																																
Avalon	Maximum	37	42	34	29	36	58	57	51	66	72	70	54	40	46	52	55	48	42	65	63	64	74	70	66	70	63	53	72	65	82	75
	Minimum	28	23	25	6	4	35	36	27	25	40	40	35	35	35	25	47	32	25	30	33	36	40	40	42	45	44	40	45	40	50	55
Grant City	Maximum	35	41	39	25	39	53	51	49	63	76	71	41	35	39	45	47	36	39	60	51	64	73	60	55	74	60	44	55	61	82	74
	Minimum	16	16	13	1	1	25	31	26	21	43	34	32	32	27	25	34	27	21	28	29	33	36	33	34	33	36	25	32	33	40	44
Kansas City	Maximum	35	35	33	23	47	58	45	52	70	74	67	40	40	47	53	52	40	44	66	48	64	80	56	68	71	50	53	73	61	81	73
	Minimum	22	25	18	8	10	35	35	29	31	53	35	35	33	30	28	32	30	27	35	39	34	48	37	41	47	37	30	42	43	50	43
Kidder §§	Maximum	46	45	34	23	40	60	55	69	55	74	53	40	39	43	51	68	37	41	65	49	65	76	53	67	62	49	51	72	53	83	71
	Minimum	17	23	22	4	10	35	34	29	24	53	35	34	34	31	27	46	28	23	33	35	31	41	35	34	45	36	28	38	38	42	68
Lexington §§	Maximum	40	37	33	23	38	60	47	55	68	70	55	40	40	47	53	55	43	43	65	44	64	75	55	67	71	54	54	72	64	82	72
	Minimum	22	21	25	8	1	34	36	29	27	50	36	34	34	31	27	44	30	25	31	32	31	40	39	38	45	37	30	38	40	45	65
Maryville §§	Maximum	36	42	33	21	40	56	42	50	66	78	47	34	36	40	46	46	36	41	59	59	64	77	55	70	74	48	54	70	63	84	58
	Minimum	11	11	14	0	0	2	20	23	21	21	32	28	28	27	24	24	25	20	24	28	28	29	32	32	34	35	23	23	34	35	40
Oregon	Maximum	36	41	37	20	42	55	49	50	65	75	63	38	35	40	45	47	35	36	60	55	60	76	60	67	70	56	50	69	58	81	73
	Minimum	15	20	18	3	5	35	30	24	25	52	32	28	30	28	24	30	25	22	32	32	31	41	32	31	38	35	23	36	34	42	41
St. Joseph	Maximum	37	42	35	21	43	58	42	50	69	77	52	37	38	42	49	51	38	43	65	55	64	80	56	69	72	47	54	74	63	82	71
	Minimum	19	21	14	7	10	36	30	27	26	37	33	33	33	29	28	31	28	25	34	33	31	43	35	36	44	36	29	41	40	46	41
Trenton	Maximum	37	40	37	30	35	53	51	46	45	70	68	49	46	41	48	50	37	37	61	59	60	69	68	65	67	64	48	64	58	78	80
	Minimum	18	22	24	1	6	30	33	29	28	41	31	35	33	31	26	34	29	23	28	31	29	40	36	35	44	36	29	36	35	44	46

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is char
the preceding day, on which it almost always occurs.



Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
F

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

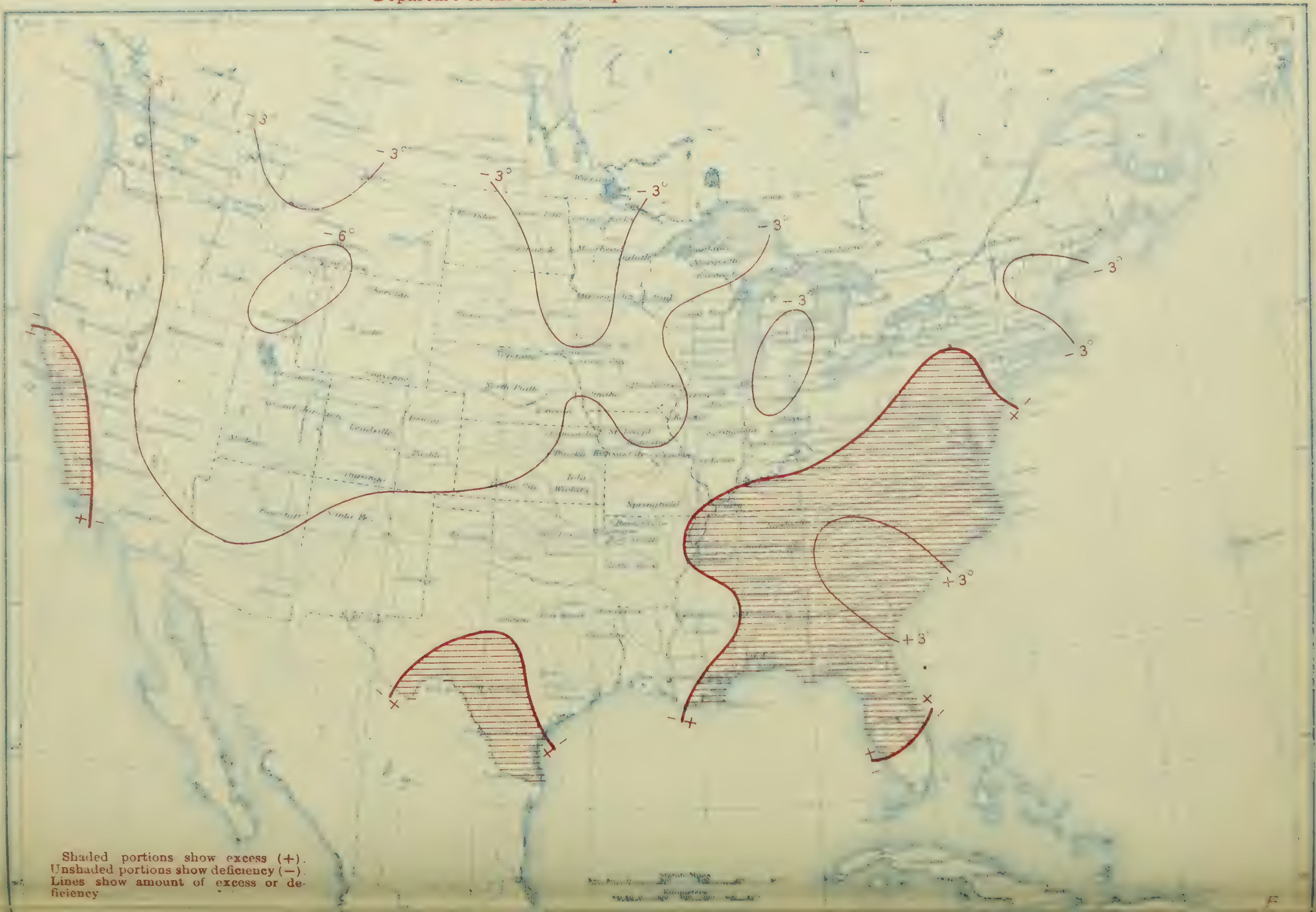
APRIL, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 22, 1917.

Departure of the Mean Temperature from the Normal, April, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXI. Columbia, Mo., April, 1917. No. 4.

GENERAL SUMMARY.

il, 1917, was colder and wetter than normal. There no damaging temperatures, however, after the first ten save at a few stations in the northern part of the State. was more precipitation during this month than for sev- nonths past, and the monthly fall amounted to nearly as as the total of the past four months. combined. Showers most daily in some part of the State, but the last four or ays of the month gave the general soaking rains, the first ny months, it is safe to say, that supplied all present and put reserve moisture in the soil.

abundant moisture resulted in a general improvement in ops. Wheat, that survived winter killing, made fair h and was stooling when the month closed. Oats, alfalfa, res, meadows, and all grasses were making good growth. s, gardens, and considerable corn were planted, and a deal was up.

ng to the scarcity of food stuff, cattle were turned on es that were not wholly in condition to receive them.

TEMPERATURE.

monthly mean, as determined from the records of 69 s, was 53.2°. The mean departure from the normal for ations having 10 or more years' record was minus 2.3°. three Aprils during the past thirty years have been cooler the present April, namely, 1907, 1904, and 1898. The rature deficiency was less marked in the Ozark Plateau utheast Lowlands than in the other three divisions. Max- temperatures did not reach 90° at a single station; 89° nt Charles on the 17th, Caruthersville on the 18th, and Clin- the 23rd were the highest. As a general rule, there were zing temperatures after the 10th, the 9th being the cold- y of the month, with temperatures varying from near the g point in the extreme southeastern counties to 19° in orthern border counties. The average number of days temperature 32° or lower was 3 in the southeastern low- . 4, Ozark Plateau, 4, southwestern plains, 6, northeast- lain, and 7, northwestern plateau.

PRECIPITATION.

e average precipitation for the State, 87 stations reporting, 5.97 inches. The departure from the normal for 83 sta- having 10 or more years' record was plus 2.02 inches. precipitation was excessive in all divisions, being less pro- ed, however, in the southwestern plain. Taking the as a whole, the least precipitation, although exceeding inches, fell in a narrow strip beginning in Bates County e running along the crest of the Ozarks to Laclede, and, e extending northeasterly to St. Charles. The precipita- was frequent, falling almost daily in some part of the . The heaviest amounts fell in the southeastern lowlands, g the southern slope of the Ozarks, and along the Missouri en Boonville and Kansas City,

ite a heavy snowstorm prevailed on the 7th and 8th. In ern counties the snow melted about as fast as it fell, but ntral counties it lay on the ground to depths varying be- n one-half inch and 3 inches, and farther northward from one to 16 inches, the last amount falling at one station, nville.

greatest amount of precipitation in any twenty-four con- tive hours was 4.80 inches, at Koshkonong on the 1st.

e average number of days with 0.01 inch or more precipi- on was 12.

EVAPORATION.

he evaporation data will be published each month, begin- with this issue, on the last page. The total evaporation for the month, at Columbia, Mo., was 3.58 inches, and the total rainfall was 4.25 inches, being 0.18 and 1.18 inches, respectively, greater than in March. The wind velocity along the surface of the pan was 401 miles greater in March than during the present month.

WIND.

The prevailing winds were from the south. The average wind movement was somewhat greater than normal, and strong gales obtained on several dates, particularly on the 7th, 20th and 30th.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 217, or about 56 per cent of the possible, and about 5 per cent below normal.

MISCELLANEOUS PHENOMENA.

Earthquakes—Quite generally felt in southeastern quarter of the State on the 9th.

Fogs—2d, and 28th.

Frosts—Heavy, 9th, 13th, 15th. Killing, 9th, 14th, and 15th.

Hail—18th, and 26th.

Halos—Solar, 3d, 5th, 6th, 10th, 14th, 15th, 17th, 18th, 19th, 20th, 22d, and 23rd. Lunar, 2d, 3rd, 5th, and 6th.

Sleet—1st, 7th, 26th, and 30th.

Thunderstorms—24th, 26th, 27, 28th, 29th, and 30th.

ERRATA FOR MARCH, 1917.

Birchtree: Number of days clear, partly cloudy, and cloudy, should be 21, 4 and 6, respectively. Jackson: Date of lowest temperature should be 5th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	29.96	76	......	242	61	8,061	11.2	38	sw.	20
Hannibal	29.98	77	......	......	......	9,000	12.5	48	e.	7
Kansas City	29.95	74	60	186	47	10,843	15.1	44	n.	7
St. Joseph	29.94	74	57	218	55	8,347	11.6	38	nw.	20
St. Louis	29.96	78	72	254	64	11,217	15.6	62	sw.	30
Springfield	29.96	72	53	231	59	9,937	13.8	42	w.	30
Cairo, Ill	29.97	72	56	......	......	7,764	10.8	47	n.	5
Keokuk, Iowa	29.98	77	64	207	50	7,283	10.1	38	sw.	20

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	57.9	+2.8	91	20	1.83	−1.89	.....	.....	5	...	....	....
1889	55.7	+0.6	90	26	2.52	−1.20	.....	.....	8	...	....	....
1890	56.2	+1.1	93	24	3.17	−0.55	.....	.....	7	...	....	....
1891	56.8	+1.7	93	15	3.90	+0.18	.....	.....	9	...	....	....
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	.....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	.....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	11	8	8
1896	61.9	+6.8	92	17	3.51	−0.21	3.00	0.0	9	11	12	7
1897	54.4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	3.82	0.7	9	11	10	9
1901	53.3	−1.8	94	21	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	1.35	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	4.06	1.2	9	11	10	9
1904	49.0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	51.9	−3.2	92	20	3.19	−0.53	1.00	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.48	2.45	0.0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	−0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	90	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	53.5	−1.6	89	20	4.99	+1.27	4.27	T.	10	12	8	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	91	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.11	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6
1916	53.5	−1.8	93	21	3.23	−0.69	2.35	1.9	10	11	8	11
1917	53.2	−2.3	89	19	5.97	+2.02	4.80	1.2	12	12	6	12

Climatological data for April, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	652	36	50.2	−4.2	83	24	26	9	39	6.09	+2.81	1.30	0.5	15	9	4	17	e.	Louis Benecke.
Clifton Hill	Randolph	731	....	51.4	−2.2	83	18	26	9	37	7.19	+3.85	2.50	T.	15	10	7	13	.....	L. S. Harlan.
Columbia	Boone	784	26	52.0	−2.3	86	23	28	9	33	4.64	+0.94	1.23	T.	17	8	6	16	ne.	U. S. Weather Bur
Fayette	Howard	725	31	50.6	−4.3	83	23	26	9	42	5.88	+2.52	2.51	0.5	15	....	....	....	.....	Prof. T. B. Smith.
Fulton	Callaway	818	12	52.7	−1.7	88	23	27	9	37	4.27	+0.14	0.81	2.0	18	16	3	11	sw.	Dr. O. M. Weigle.
Gorin	Scotland	700	27	......	......	......	......	......	......	....	5.64	+1.79	1.78	3.0	10	2	9	19	ne.	J. W. Pulliam.
Hannibal	Marion	534	23	50.1	−3.5	84	18	29	9	30	6.38	+3.13	2.13	2.2	16	6	10	14	ne.	U. S. Weather Bure
Jefferson City	Cole	557	30	52.2	−4.6	87	23	28	9	37	4.56	+1.20	0.85	0.1	14	18	3	9	s.	Miss Emma Swift.
Keytesville	Chariton	660	3	......	......	......	......	......	......	....	7.73	......	2.32	0.1	16	....	....	....	.....	J. T. Dewey, M. D.
Kirksville	Adair	969	24	47.4	−4.1	80	18	23	9	43	6.00	+2.54	1.43	3.8	13	7	12	11	s.	Mark Burrows.
Louisiana	Pike	469	38	52.6	−1.1	85	18	26	9	33	4.28	+2.18	1.15	1.2	12	15	6	9	w.	J. T. Farrell.
Macon	Macon	875	18	47.9	−6.0	81	18	26	9	42	6.05	+3.17	1.73	1.0	15	7	7	16	ne.	John A. Cook.
Mexico	Audrain	797	38	51.1	−3.2	85	17†	24	9	51	5.11	+1.59	1.50	3.0	13	8	0	22	e.	R. M. Llewellyn.
Oakfield	Franklin	500	35	53.4	−2.9	86	23	26	9	31	4.84	+0.59	0.86	2.0	15	9	10	11	s.	E. E. Stones.
Palmyra	Marion	652	4	49.2	−5.4	83	18	23	10	45	5.82	+2.55	1.87	7.5	12	5	8	17	se.	W. B. Markell.
St. Catherine	Linn	850	3	48.6	......	79	18	24	9	34	5.97	......	1.60	6.0	14	7	10	13	ne.	L. D. Baker.
St. Charles	St. Charles	456	38	53.4	−2.2	89	17	27	9	36	3.70	+0.16	1.70	0.5	10	10	10	10	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	53.7	−2.4	84	23	30	9	26	4.64	+1.12	2.09	1.0	14	8	13	9	s.	U. S. Weather Bure
St. Louis (2)	......do	578	4	53.0	......	85	18†	30	9	28	5.07	......	1.33	2.4	14	13	8	9	se.	St. Louis Universit
Shelbina	Shelby	779	24	......	......	......	......	......	......	....	7.47	+4.28	1.80	0.6	12	....	....	....	.....	S. G. Parsons.
Steffenville	Lewis	650	23	50.8	−2.4	85	17†	25	9	37	6.78	+3.36	2.00	5.0	13	5	13	12	ne.	Frank Hall.
Unionville	Putnam	1,072	23	45.6	−5.5	82	18	19	9	43	6.43	+2.89	1.60	16.0	15	11	9	10	n.	Geo. W. Davis.
Warrenton	Warren	865	25	52.2	−2.6	88	23	25	9	38	4.55	+0.33	1.17	2.0	13	4	14	12	nw.	Prof. J. H. Frick.
Section means and extremes		......	....	50.9	−3.4	89	17	19	9	51	5.61	+2.06	2.50	2.6	14	9	8	13	ne.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	.....	F. E. Tate.
Caruthersville	Pemiscott	220	25	61.6	+1.7	89	18	36	3†	40	5.05	+0.96	2.40	0.0	9	18	8	4	e.	H. E. Averill.
Doniphan	Ripley	344	11	58.4	+0.4	84	18†	30	9	34	10.74	+5.36	4.60	0.0	12	18	3	9	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	56.6	−0.4	86	23	29	14	41	8.71	+4.17	3.91	0.0	8	9	10	11	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	57.2	+0.7	85	21†	30	3†	48	7.65	+3.01	2.00	0.0	9	12	11	7	n.	Dr. A. F. Hendrick
Patton (near)	Bollinger	500	1	......	......	......	......	......	......	....	5.30	......	2.30	0.0	8	16	0	14	s.	George F. Ellis.
Poplar Bluff	Butler	339	12	56.6	−3.6	87	24	28	9	47	8.74	+4.31	2.22	0.0	12	13	6	11	.....	Miss Belle Kinne.
Sikeston	Scott	328	15	58.8	+0.9	84	24	31	9	32	7.77	+3.54	3.43	0.0	12	11	12	7	s.	W. E. Burnham.
Cairo, Ill.	Alexander, Ill	359	43	58.0	−0.3	83	18	33	8	28	6.96	+3.39	3.62	T.	10	10	9	11	s.	U. S. Weather Bure
Section means and extremes		......	....	58.2	−0.1	89	18	28	9	48	7.62	+3.53	4.60	T.	10	13	7	10	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	56.2	−0.9	84	23	28	9	33	9.93	+5.23	3.00	0.0	9	21	1	8	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	28	52.9	−3.7	78	24	25	9	36	3.87	−0.29	0.68	0.0	11	17	6	7	nw.	A. C. Fink.
Cassville	Barry	1,500	5	56.0	......	81	24	32	8†	40	3.63	−0.26	0.95	0.0	5	16	4	10	s.	Mrs. Zuma Bloomer
Crocker	Pulaski	1,126	5	56.8^{f}	+1.0	84	18	......	......	37	......	......	......	0.9	....	20^{f}	0^{f}	4^{f}	n.	Roy W. Reed.
Dean	McDonald	1,000	17	55.9^{a}	−1.7	84	22	25	9	51	4.34	+0.14	1.36	0.0	9	18	1	10	.....	H. E. Dean.
Eldon	Miller	934	15	51.4	−5.0	84	17	25	9	41	5.78	+1.27	2.74	T.	11	6	14	10	ne.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	57.0	......	86	23	30	9	39	8.44	+5.05	2.30	0.0	11	17	0	13	s.	R. C. Walton.
Gano	Dent	1,250	12	54.2	−2.3	85	19†	27	9	32	6.90	+2.07	1.76	2.2	13	13	7	10	se.	A. C. Leach.
Goodland	Iron	1,000	11	53.2	−1.7	85	23	25	9	42	8.54	+3.52	2.45	0.0	11	14	7	9	s.	F. M. Adams.
Hollister	Taney	735	7	57.2	−2.9	86	23	30	9	50	9.25	+5.56	2.50	0.0	6	16	0	14	nw.	W. P. Chapmann.
Houston	Texas	1,280	23	55.0	−1.0	83	23	26	9	33	6.58	+1.82	2.16	T	10	16	3	11	nw.	R. F. Harmon.
Ironton	Iron	925	38	54.4	−1.2	86	23	25	14	39	7.69	+3.19	2.42	0.5	12	9	10	11	ne.	W. H. Delano.
Koshkonong	Oregon	958	15	57.3^{b}	−0.7	85	24	29	9	37	10.82	+5.78	4.80	0.0	8	12^{b}	8^{b}	8^{b}	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	52.4	−3.9	87	24	24	9†	46	3.49	−0.67	0.88	0.0	16	17	1	12	s.	Leonard E. Dickers
Lockwood	Dade	1,078	21	55.3	−1.3	83	23	27	9	39	3.86	+0.47	0.98	T.	9	12	4	14	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	52.8	−2.1	81	23	26	9	30	5.12	+0.16	1.85	0.0	9	9	12	9	s.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	56.0	+0.3	82	23	28	9	35	5.30	+1.72	1.51	0.0	11	16	6	8	sw.	C. L. White.
Neosho	Newton	1,011	33	56.8	−1.4	83	23	25	9	38	5.43	+1.28	1.65	0.0	9	17	4	9	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	53.8	−1.7	86	23	28	9	39	5.78	+1.41	0.86	1.0	12	14	8	8	se.	Prof. Elmo G. Harr
Springfield	Greene	1,350	28	54.0	−1.7	82	23	30	9	27	4.63	+0.77	1.76	0.9	12	15	9	6	se.	U. S. Weather Bure
Section means and extremes		......	....	54.9	−1.8	87	24	24	9	51	6.29	+2.01	4.80	0.2	10	15	5	10	s.	
Southwest Plain.																				
Amoret	Bates	831	7	52.6	−2.8	85	23	24	9	38	3.47	−0.97	1.42	T.	14	6	8	16	se.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	55.0	−1.1	85	23	26	9	37	4.11	−0.17	0.98	T.	15	11	8	11	sw.	W. G. Bigelow.
Clinton	Henry	765	29	55.6	−0.4	89	23	21	9	43	3.81	−0.27	1.37	0.0	9	11	9	10	se.	A. E. Derwent, M. I
Harrisonville	Cass	912	43	51.3	−3.0	87	23	25	9	43	4.80	+1.33	1.90	0.8	13	6	2	22	e.	A. J. Sharp.
Lamar	Barton	980	35	55.8	−1.2	86	23	25	9	43	4.63	+0.53	1.38	0.0	9	11	6	13	se.	Joe W. Springer.
Lamonte	Pettis	863	27	52.0	−4.3	85	23	23	9	37	5.40	+1.66	1.87	T.	9	13	6	11	ne.	J. Ed. Hall.
Marshall	Saline	779	25	51.5^{a}	−3.3	84	23	25	9	34	6.92	+3.37	2.55	0.5	14	10	5	15	sw.	Prof. W. H. Black.
Nevada	Vernon	860	22	55.0	−0.1	84	23†	25	9	39	3.72	0.00	1.17	0.0	9	15	5	10	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	53.2	−3.2	88	23	27	9	39	6.00	+2.88	1.60	T.	16	11	4	15	sw.	Geo. H. Collins.
Warsaw	Benton	687	11	54.3	−2.1	87	23	23	9	44	5.71	+1.69	1.45	0.0	13	8	13	9	e.	J. R. Smith, M. D.
Section means and extremes		......	....	53.6	−2.2	89	23	21	9	44	4.86	+1.00	2.55	0.1	12	10	7	13	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	51.2	−2.5	83	24	26	9	36	7.20	+4.00	2.85	0.0	9	11	6	13	.....	F. G. Ashbaugh.
Bethany	Harrison	916	26	48.9	−2.3	76	19†	19	9	39	6.83	+3.87	1.38	8.1	14	5	7	18	nw.	M. H. Moulton.
Conception	Nodaway	982	31	48.3	−4.0	83	22	24	8†	35	4.66	+1.94	1.31	3.0	11	8	15	7	ne.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	16	......	......	......	......	......	......	....	6.34	+2.73	1.85	1.0	16	9	7	14	nw.	Robert R. Wynne, J
Grant City	Worth	1,134	23	48.4	−3.9	82	22	24	8	36	5.26	+2.38	1.15	3.0	10	10	9	11	e.	W. H. Campbell.
Kansas City	Jackson	963	27	52.0	−2.3	85	23	30	8	30	6.87	+3.58	2.72	2.0	14	11	4	15	s.	U. S. Weather Bure
Kidder	Caldwell	1,020	25	50.5	−2.4	84	18	28	2†	34	5.11	+2.28	1.25	2.0	14	11	6	13	ne.	J. F. Sharp.
Lexington	Lafayette	688	34	51.2	−3.4	84	23†	25	9	34	7.43	+4.22	2.06	3.0	15	14	0	16	s.	J. W. Keithley.
Liberty	Clay	864	27	53.0^{c}	−2.5	86	22	26	9	40	7.24	+4.22	3.08	T.	12	11^{c}	7^{c}	9^{c}	e.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	46.7	−3.9	35	22	24	8	41	4.07	+1.37	1.25	1.0	11	11	3	16	e.	J. R. Brink.
Oregon	Holt	1,048	60	48.3	−4.4	81	22	26	8†	37	4.53	+1.29	0.90	T.	10	7	11	12	ne.	Tom Curry.
St. Joseph	Buchanan	967	44	50.7		85	22	29	8	33	4.77	+1.90	1.13	1.8	13	8	10	12	ne.	U. S. Weather Bure
Tarkio	Atchison	976	4	49.2	−4.1	87	22	23	8	51	3.87	+0.92	1.08	0.0	13	11	5	14	ne.	John F. Frazier.
Trenton	Grundy	822	21	49.8	−3.4	80	18	26	9	31	7.26	+4.42	1.54	1.0	13	10	7	13	ne.	W. H. Estes.
Section means and extremes		......	....	49.9	−3.3	87	22	19	9	51	5.81	+2.90	3.08	2.0	12	10	7	13	ne.	
State means and extremes		......	....	53.2	−2.3	89	17†	19	9	51	5.97	+2.02	4.80	1.2	12	12	6	12	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete repo used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5.

Daily precipitation for April, 1917.

Stations.	Watersheds.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Northeast Plain.																																	
nville	Missouri	.33	.67	....	.15	.38	....	T.	.17	....	....	....	....	.19	....	....	.17	.04	.25	.42	.15	....	....	....	T.	.45	....	1.08	.38	.18	.50	....	5.51
nswick	Grand	.30	.35	....	.26	.21	....	.06	.46	....	....	T.	....	....	....	....	.29	.48	.05	T.	.12	....	....	....	....	.05	....	1.30	.86	.33	.97	....	6.09
ton Hill	Chariton	.70	....	....	.35	....	....	.23	.05	....	....	.05	....	....	....	.10	.12	.31	....	.10	....	....	....	....	....	.35	.07	1.12	1.08	.06	2.50	....	7.19
umbia***	Missouri	.60	....	....	.33	.03	....	.14	.03	....	....	T.	.28	....	....	.09	.01	.06	.20	.20	T.	....	....	....	.12	....	.15	1.08	.30	.06	.96	....	4.64
ette	do	.69	....	....	.28	09	....	....	.15	....	....	.07	....	....	....	....	.23	.36	.17	.15	....	....	....	....	.30	....	.20	.38	.30	.28	2.23	....	5.88
ton	do	.64	....	....	.44	.02	....	.15	.20	....	....	....	.16	.01	....	.05	.13	....	.30	.08	.01	....	....	....	....	.06	.16	.57	.44	.04	.81	....	4.27
neoe ‖	Meramec	1.20	.45	....	....	.32	....	....	.40	T.	....	....	....	.03	....	....	.12	T.	....	.25	....	....	....	....	....	T.	....	.36	1.10	.36	.54	....	5.13
rn	Mississippi	.22	....	....	.81	....	....	.42	....	....	....	....	....	....	....	....	.09	....	.07	.13	....	....	....	....	.26	....	....	.90	.96	....	1.78	....	5.64
nnibal***	do	.60	....	....	.18	.02	....	.27	.09	....	....	T.	....	....	T.	.07	.25	.01	.23	.01	T.	....	....	....	.32	....	.49	1.62	.06	.90	1.26	....	6.38
rmann	Missouri	.05	.34	....	....	.34	....	....	.67	....	....	....	T.	.20	....	....	.12	T.	....	.37	.08	....	....	....	....	.10	....	1.05	1.40	.07	.16	....	4.95
erson City ‖	do	.85	.05	....	....	.35	....	.02	.48	....	....	....	....	.15	....	....	.18	....	....	.55	.17	....	....	....	....	.09	....	.57	.85	.10	.15	....	4 56
ytesville	Chariton	1.34	....	....	.48	....	....	.20	.07	....	....	.05	....	....	....	.09	.05	.55	T.	.10	....	....	....	....	.05	.07	.11	1.30	.80	.15	2.32	....	7.73
ksville	Mississippi	.23	....	....	.46	.02	....	.85	....	....	....	.01	....	....	....	....	.22	.28	....	.09	T.	....	....	....	....	....	.17	1.43	.76	.05	1.43	....	6.00
asiana	do	.90	....	....	.12	....	....	.08	.35	....	....	....	.02	....	....	....	.18	....	.22	.02	....	....	....	....	....	.40	....	1.15	.18	T.	.66	....	4.28
eon ‖	Chariton	.18	.47	....	.20	.37	....	.05	.57	....	....	....	....	....	....	....	.27	.29	....	.41	.05	....	....	....	....	.34	....	1.73	.79	.09	.24	....	6.05
xico ‖	Mississippi	.18	.47	....	....	.45	....	....	.24	....	....	....	.09	....	....	....	.35	.06	....	1.50	....	....	....	....	....	.25	....	1.00	.30	.06	.16	....	5.11
xfeld	Meramec	.74	....	....	.45	.06	....	.12	.39	....	....	....	.04	....	....	.04	.08	....	.24	.04	....	....	....	....	....	.21	.09	.76	.86	....	.72	....	4.84
ffie	do	.95	.55	....	....	.20	....	....	.75	T.	....	....	T.	.02	....	....	.06	T.	....	.27	T.	....	....	....	....	.05	....	.60	1.75	.27	.58	....	6.05
myra ‖	Mississippi	.40	.35	....	....	.32	....	....	.75	....	....	....	....	....	....	....	.47	.05	....	.16	....	....	....	....	....	.25	....	1.87	.56	.04	.60	....	5.82
Catherine	Grand	.21	....	....	.40	.12	....	.67	.02	....	....	T.	....	....	....	.10	.42	.25	T.	.18	T.	....	....	....	....	....	.15	1.45	.68	.05	1.27	....	5.97
Charles	Missouri	.57	....	....	.32	T.	....	T.	.05	....	....	....	T.	.34	....	.16	.05	....	.18	T.	....	....	....	....	....	.15	....	.18	1.70	....	T.	....	3.70
ouis (1)***	Mississippi	.52	....	....	.22	.01	....	.12	.22	....	....	T.	.09	....	....	.13	.06	....	.13	T.	....	....	....	....	T.	.06	.10	1.28	.90	....	.80	....	4.64
Louis (2)	do	.44	....	....	.26	.03	....	.20	.37	....	....	....	.12	....	....	.15	.09	....	.26	T.	....	....	....	....	....	.05	.12	1.15	.78	....	1.05	....	5.07
lbana	do	.99	....	.06	.67	....	....	.33	....	....	....	.04	....	....	....	....	.49	.20	....	.24	....	....	....	....	.37	....	....	1.73	.55	....	1.80	....	7.47
denville	do	.64	....	....	.60	....	....	.60	.05	....	....	....	....	....	....	....	.30	.10	T.	....	.43	....	....	....	....	.05	.31	.10	2.00	.25	1.35	....	6.78
ion	Meramec	1.25	.60	....	....	.34	....	....	.55	....	....	....	....	.09	....	....	.04	.01	.10	.31	.03	....	....	....	....	.10	....	.34	1.78	.26	54	....	6.24
ionville ‖	Grand	....	.20	....	.10	.85	....	.12	1.60	....	....	T.	.10	....	....	....	.04	.90	....	.06	.35	.06	....	....	....	....	....	.70	.60	.65	.10	....	6.43
ley Park‡ ‖	Meramec	.66	.62	....	....	.34	T.	....	.45	.15	....	....	....	.04	....	....	.12	.07	....	.28	.03	....	....	....	....	.07	....	.38	1.78	.23	.53	....	5.75
rrenton‡	Mississippi	.20	23	....	....	.18	....	....	.67	....	....	....	....	.09	....	....	.28	....	....	.72	.02	....	....	....	....	06	....	.73	1.17	.15	.05	....	4.55
outheast Lowlands.																																	
e Girardeau‖ ‖	Mississippi	2.80	1.10	....	....	.80	....	....	1.50	.10	....	....	....	.60	....	....	....	....	....	....	.02	....	....	....	....	.05	....	....	1.20	.50	.30	....	8.97
uthersville	do	2.40	....	....	.25	.73	....	.21	.89	....	....	....	.05	....	....	....	....	....	....	T.	.13	....	....	....	....	T.	T.	....	.37	T.	.02	....	5.05
phan	Black	4.60	....	....	.35	....	....	1.17	.45	....	....	....	.60	....	....	....	....	....	....	.70	.60	....	....	....	....	05	....	.25	1.50	.02	.45	....	10.74
kson	Mississippi	3.91	....	....	....	....	....	1.85	....	....	....	....	27	....	....	....	....	....	....	.30	....	....	....	....	....	.10	....	1.35	58	.35	....	....	8.71
ble Hill	do	2.00	.90	....	....	....	....	....	1.40	....	....	....	....	50	....	....	....	....	....	.20	.15	....	....	....	.25	....	....	....	2.00	....	.25	....	7.65
Madrid ‖	do	1.85	1.60	....	.16	.54	....	....	1.20	20	....	....	....	.08	....	....	....	....	....	....	07	.02	....	....	....	.08	....	....	1.17	.25	.03	....	7.25
ton (near)	do	.30	....	....	....	....	....	....	1.10	....	....	....	.70	....	....	....	....	....	....	.10	.20	....	....	....	....	.15	....	....	2.30	....	.45	....	5.30
lar Bluff‖ ‖	Black	2.10	2.22	....	.18	.29	....	....	1.79	....	....	....	.03	.30	....	....	....	....	....	....	.24	....	....	....	....	.03	....	T.	.95	.52	.09	....	8.74
eston	Mississippi	3.43	....	....	.14	.28	....	.12	1.24	.01	....	....	.19	.34	....	....	....	....	....	....	.02	....	....	....	....	.03	....	T.	1.76	T.	.21	....	7.77
ro, Ill ***	do	3.62	T.	....	.31	.19	....	.46	.52	....	....	....	.15	....	....	....	....	....	....	T.	.02	....	....	....	....	T.	T.	.03	1.27	....	.39	....	6.96
zark Plateau.																																	
ington ‖	Gasconade	.90	.40	....	....	.30	....	.10	.80	.15	....	....	....	.70	....	....	....	.05	....	.35	.12	....	....	....	....	.10	....	.04	.70	.20	.80	....	5.71
ckwell ‖	Meramec	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
chtree	Black	2.95	....	....	.10	....	....	.52	3.00	....	....	....	.22	....	....	....	....	....	.24	.56	....	....	....	....	....	....	....	....	1.54	....	.80	....	9.93
ivar	Osage	.67	....	....	.02	....	....	.07	....	....	....	....	.68	....	....	....	....	....	.45	.40	....	....	....	....	.01	....	.36	.62	.04	....	.55	....	3.87
sville	White	....	....	....	....	....	....	....	....	....	....	....	93	....	....	T.	....	....	.35	.87	....	....	....	....	....	....	....	....	.53	....	.95	....	3.63
n	Neosho	.68	....	....	....	....	....	....	....	....	....	....	1.25	....	.03	....	....	....	.31	1.36	....	....	....	....	....	....	.04	.07	.06	....	.54	....	4.34
on	Osage	.80	....	....	....	.05	....	.12	.12	....	....	....	.20	....	....	....	T.	....	.55	.32	....	....	....	....	....	.18	....	.34	2.40	....	.70	....	5.78
it City	Black	2.30	....	....	.10	....	....	.50	1.70	....	....	.35	.35	....	....	....	....	....	.75	.25	.10	....	....	....	....	....	....	T.	1.02	....	1.02	....	8.44
no	Meramec	1.76	....	....	.05	.29	....	.28	1.38	....	....	....	.25	....	....	....	.14	....	.26	.27	....	....	....	....	....	.08	T.	.05	1.16	....	.93	....	6.90
dland	Black	2.38	....	....	.34	08	....	....	1.45	....	....	....	.25	....	....	....	....	....	.40	.13	....	....	....	....	....	....	.10	....	2.45	.09	.87	....	8.54
nster	White	2.50	....	....	....	....	....	....	....	....	....	2.00	....	....	....	....	....	....	.40	2.30	....	....	....	....	....	....	....	....	1.35	....	70	....	9.25
nston	Gasconade	2.16	....	....	T.	.16	....	.36	.40	....	....	....	.17	....	....	....	T.	....	.28	.75	....	....	....	....	....	T.	.25	T.	1.22	....	.83	....	6.58
nton	Mississippi	1.73	.69	....	....	.10	T.	....	1.30	.10	....	....	....	.13	....	....	....	....	....	.25	.25	....	....	....	....	.16	....	T.	.90	1.13	.95	....	7.69
hkonong	Black	4.80	....	....	T.	....	....	.70	.95	....	....	....	.40	....	....	....	....	....	T.	1.18	....	....	....	....	....	....	....	1.28	.77	....	.73	....	10.82
anon	Osage	.88	.03	....	....	.07	....	.02	.08	....	....	....	.02	.63	....	....	.02	....	....	.39	.24	....	....	....	....	.12	....	.14	.25	.17	.43	....	3.49
wood	do	.71	....	....	....	....	....	....	T.	....	....	....	.98	.06	....	....	....	....	.36	.75	....	....	....	....	....	....	.35	.10	.10	....	.45	....	3.86
untain Grove	White	1.85	.20	....	....	....	....	....	.22	....	....	....	T.	.48	....	....	T.	....	....	.38	.48	....	....	....	....	T.	....	.10	.65	T.	.76	....	5.12
. Vernon	Neosho	1 51	....	....	....	....	....	....	.01	....	....	.01	1.42	.17	....	....	....	....	.35	.91	....	....	....	....	....	....	21	.07	.04	....	.60	....	5.30
osho	do	1.65	....	....	....	....	....	....	....	....	....	....	1.21	.15	....	....	T.	....	.41	1.18	....	....	....	....	....	....	.14	.16	.02	....	.50	....	5.43
lla‖ ‖	Meramec	.86	.46	....	....	.32	....	....	.85	.09	....	....	....	.61	....	....	T.	....	....	.82	.17	T.	....	....	....	.04	....	T.	.64	.25	.67	....	5.78
em	Meramec	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
ringfield ***	White	1.17	T.	....	....	.01	....	T.	.05	....	....	T.	1.14	....	....	....	.01	....	.34	.59	....	....	....	....	.11	....	.11	.36	.04	....	.70	....	4.63
lville ‖	Meramec	.42	88	....	....	.28	....	....	1.35	.22	....	....	....	.60	....	....	.06	T.	....	.42	.11	....	....	....	....	.09	....	.03	.67	.64	.89	....	6.66
cumbia ‖ ‖	Osage	.76	.02	....	....	.13	....	....	.28	....	....	....	....	.18	....	....	.02	....	....	.70	.27	....	....	....	....	.03	....	....	1.28	.08	.10	....	3.85
Southwest Plain.																																	
ret	Osage	.25	....	....	.05	....	....	T.	....	....	....	.13	.79	.03	....	.03	....	....	....	.50	.03	....	....	....	.05	....	.05	.02	.09	.03	1.42	....	3.47
leton City	do	.75	.01	....	.04	....	....	....	T.	....	....	13	.70	.04	....	T.	.30	.26	....	.59	T.	....	....	....	T.	.04	.02	.11	.13	.01	.98	....	4.11
ton	do	.72	....	....	.22	....	....	....	....	....	....	.15	.50	....	....	....	.13	.12	....	.50	....	....	....	....	....	....	....	....	.10	....	1.37	....	3.81
rrisonville ‖	do	.16	.05	....	.12	T.	....	T.	.07	....	....	T.	.08	.16	....	....	T.	.90	.30	.30	....	....	....	....	....	....	....	.48	.20	.08	1.90	....	4.80
mar ‖	Neosho	.50	.10	....	....	....	....	....	....	....	....	....	.05	1.38	....	....	....	....	....	1.18	.58	....	....	....	....	T.	....	.19	.42	....	.23	....	4.63
aonte	Missouri	.95	....	....	.30	....	....	....	T.	....	....	T.	.45	....	....	T.	....	.55	....	.42	T.	....	....	....	....	T.	.35	....	.30	.21	1.87	....	5.40
rshall	do	.74	....	....	.34	....	....	.18	.21	....	....	.05	T.	....	....	.06	.05	.45	....	.17	T.	T.	....	....	....	T.	.25	.55	.82	.50	2.55	....	6.92
vada	Osage	.28	....	....	....	....	....	....	....	....	....	.10	.84	.12	....	....	....	....	....	.82	....	....	....	....	....	.26	.10	....	.03	....	1.17	....	3.72
rrensburg	Missouri	.81	....	....	.12	....	....	.06	.11	....	....	.08	.12	.04	....	T.	....	.93	....	.69	.01	....	....	....	....	.11	.21	.35	.56	.20	1.60	....	6 00
rsaw	Osage	1.45	....	....	.35	....	....	T.	.11	....	....	....	.75	.03	....	....	.30	.10	.75	.12	T.	....	....	....	T.	.27	T.	.20	.26	T.	1.02	....	5.71
averly ‡	Missouri	.52	.03	....	.30	.04	....	.04	.69	....	....	T.	.07	....	....	....	.18	.41	....	.05	02	....	....	....	....	T.	....	2.26	1.60	.45	1.59	....	8.25
Northwest Plateau.																																	
alon	Grand	.30	....	....	.25	....	....	1.10	....	....	....	....	....	....	....	.15	.70	....	....	....	....	....	....	....	....	....	....	1.75	1.10	.05	1.80	....	7.20
t any	do	T.	....	T.	.30	....	....	1.37	07	....	....	....	....	....	....	.10	24	.20	.43	.03	.02	....	T.	....	T.	....	.22	1.37	1.38	.06	1.04	....	6.83
llicothe ‖	do	....	.15	....	.21	.24	....	.10	.45	....	....	.04	....	....	....	....	.15	.31	....	.09	.02	....	....	....	....	....	....	1.62	.73	.61	.48	....	5.20
ception	Missouri	....	....	....	.07	....	....	.76	....	....	....	.12	....	....	....	.10	.05	....	....	.50	.06	....	....	....	....	....	.26	.88	1.31	T.	.55	....	4.66
llatin	Grand	.05	T.	....	.21	.02	....	.77	.10	....	....	01	....	....	....	.15	.03	.17	.09	.03	T.	....	....	....	....	....	.16	1.34	1.85	.04	1.32	....	6.34
ant City	do	T.	T.	T.	....	.55	....	.95	....	....	....	.11	....	....	....	T.	.33	....	....	.51	.08	....	....	....	T.	....	.32	.71	1.15	T.	.55	....	5.26
nsas City***	Missouri	.06	....	....	.05	....	....	.56	.01	....	....	.21	....	....	....	.02	....	.87	....	.09	.01	....	....	....	....	....	.37	2.64	.63	.03	1.32	....	6.87
ler	Grand	....	.05	....	.06	.10	....	.18	.50	....	.02	....	....	....	....	T.	.32	36	....	.05	.02	....	....	....	....	....	....	1.25	.65	1.10	.45	....	5.11
xington	Missouri	.10	.25	....	.10	.08	....	.08	.85	....	....	....	.14	....	....	....	.10	.70	.11	T.	.17	....	....	....	....	....	....	2.06	1 00	.28	1.41	....	7.43
erty	do	T.	....	....	....	....	....	.50	.46	....	....	.11	....	....	....	.06	T.	1.03	....	.11	.03	....	....	....	....	....	.20	1.44	1.64	.20	1.46	....	7.24
aryville	do	....	T.	....	.05	.40	....	.43	.10	....	....	.07	....	....	....	....	.10	.10	....	....	....	.18	....	T.	....	....	....	.93	.36	1.25	.10	....	4.07
egon	do	T.	....	....	.28	....	....	.90	....	....	....	T.	....	....	....	.24	....	.11	....	.02	.10	....	....	....	....	....	**	**	2.22	....	.66	....	4.53
oseph***	Missouri	T.	T.	....	.05	....	....	1.13	....	....	....	.10	.01	....	....	.17	.01	.29	....	.11	T.	....	....	....	T.	....	.47	.70	.75	.01	.97	....	4.77
rkio	do	....	....	....	.28	....	....	.55	....	....	....	.06	....	....	....	.05	.25	.02	....	.01	.32	....	....	....	....	....	.18	.75	1 08	.02	.30	....	3.87
nton	Grand	.09	....	19	.31	....	....	.68	....	....	.03	....	....	....	....	.20	.24	....	....	.23	T.	....	....	....	T.	....	1.54	1.33	.97	.85	.60	....	7 26

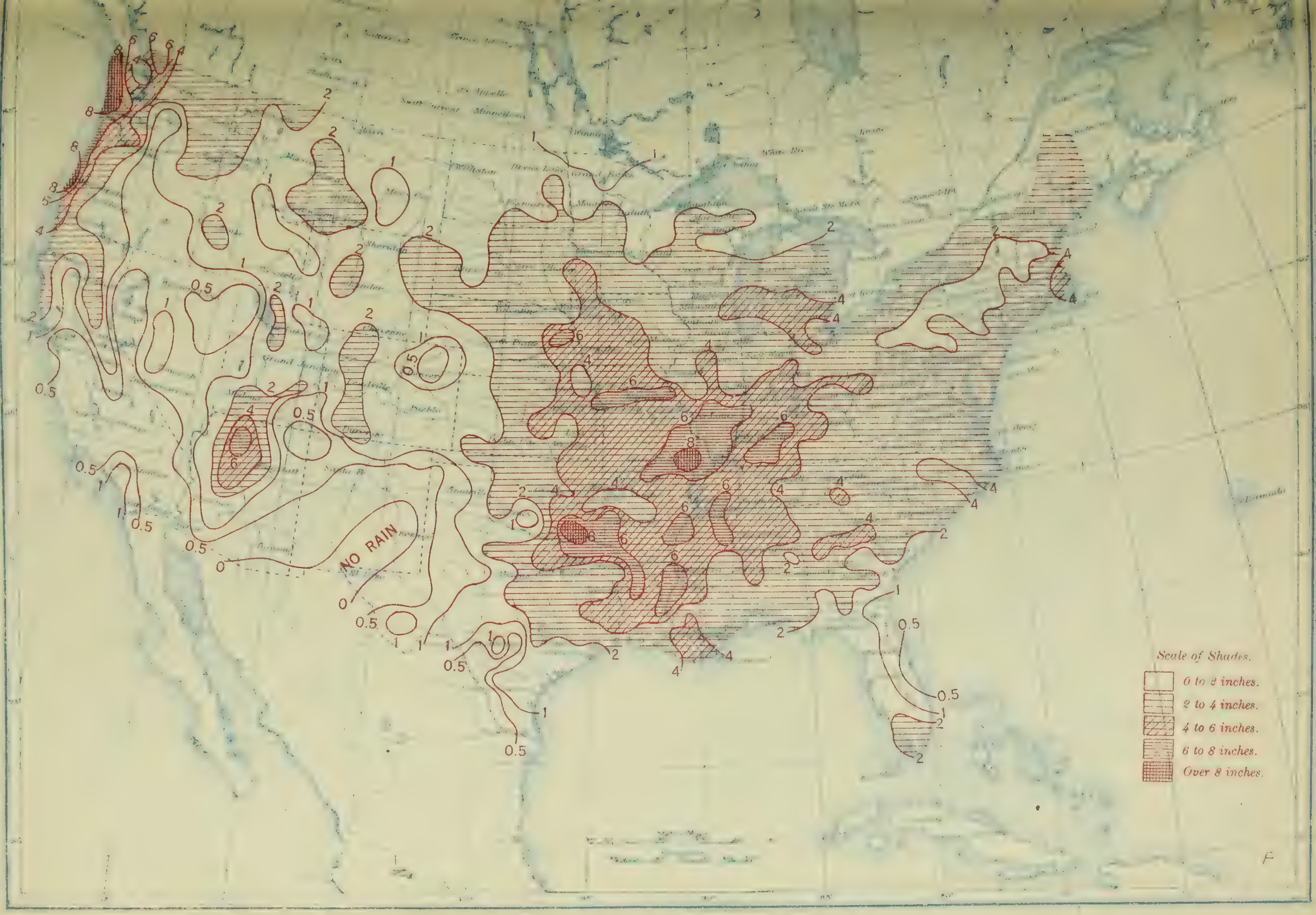
Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the ne of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0 01 inch.
* Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate tes of fall not recorded.

Daily temperatures for April, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	56	56	60	52	58	60	44	47	55	71	67	58	56	58	48	61	79	80	76	50	71	80	80	83	63	[illegible]	45	[illegible]	45	43
	Minimum	41	32	33	42	36	34	38	30	26	30	42	44	35	35	30	44	47	57	58	47	39	42	55	48	34	35	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	50	51	62	51	51	59	51	46	57	70	70	57	51	59	52	73	83	83	80	62	72	81	80	83	[illegible]	[illegible]	49	[illegible]	[illegible]	[illegible]
	Minimum	36	32	30	40	37	33	31	31	28	44	52	46	34	34	31	45	[illegible]	60	61	45	42	52	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	47	53	60	53	54	60	50	43	56	70	66	56	50	58	49	68	[illegible]	81	77	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	35	30	39	39	35	32	31	30	26	40	51	44	32	34	33	44	55	65	65	44	40	[illegible]	55	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	48	53	58	50	51	57	46	43	52	68	65	59	50	52	52	60	76	84	78	64	72	81	71	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	36	33	42	42	37	31	32	31	29	44	56	44	32	31	32	44	52	59	58	46	42	52	50	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	47	56	63	56	54	62	50	46	57	69	75	54	53	65	55	76	83	[illegible]	79	53	73	81	87	79	[illegible]	[illegible]	[illegible]	54	[illegible]	[illegible]
	Minimum	44	33	35	43	38	32	40	32	28	32	42	49	34	33	33	44	48	59	58	48	46	44	57	52	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	54	53	56	52	54	50	51	37	50	67	61	64	69	62	52	54	73	80	75	70	72	72	73	72	64	49	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	33	28	38	40	33	34	30	24	23	24	25	26	28	26	28	40	51	59	56	42	37	51	45	[illegible]	34	32	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	68	63	60	58	50	57	54	46	53	68	69	64	57	57	60	63	80	85	78	75	70	82	80	75	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	42	35	37	42	38	28	36	33	26	37	48	45	32	36	29	43	47	60	60	50	42	48	57	[illegible]	47	57	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	42	53	60	49	55	57	41	41	53	70	64	59	52	56	54	59	80	81	77	49	72	74	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	40	30	30	39	35	31	35	27	26	28	38	44	30	32	34	33	45	54	57	46	38	35	50	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	47	55	63	50	54	60	41	43	56	71	70	56	50	61	57	71	85	81	85	81	83	78	82	85	62	57	57	57	[illegible]	[illegible]
	Minimum	43	31	38	40	36	31	31	30	24	37	49	43	31	31	33	42	58	48	61	36	35	42	43	34	44	35	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	62	55	60	63	52	58	51	47	54	67	74	65	52	62	60	65	82	85	80	[illegible]	71	81	86	74	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	39	35	35	42	37	34	41	32	26	37	48	50	31	31	36	44	56	61	59	51	42	51	59	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	53	56	58	54	55	56	52	38	52	67	65	59	53	55	49	57	75	79	74	65	71	76	71	75	65	49	45	[illegible]	[illegible]	[illegible]
	Minimum	34	27	38	40	34	29	34	26	24	38	49	40	31	33	28	40	52	59	57	43	37	47	49	45	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	63	53	58	60	47	57	53	46	51	62	74	59	49	59	58	62	81	83	78	69	70	79	84	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	38	37	44	41	39	38	41	33	30	38	50	40	32	36	42	46	55	63	62	49	47	54	62	53	48	44	45	40	[illegible]	[illegible]
Unionville §§	Maximum	46	55	56	44	56	60	42	40	50	66	62	58	53	54	52	62	80	82	66	59	72	74	69	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	36	26	28	38	33	33	33	22	19	23	50	35	28	30	26	28	40	50	56	42	36	40	42	[illegible]	39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	50	55	62	60	51	60	46	44	57	68	75	56	50	59	55	70	84	84	82	64	73	82	88	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	46	35	36	41	37	33	39	31	25	31	40	47	30	31	36	42	46	60	60	60	41	48	59	49	46	36	41	[illegible]	42	42
Southeast Lowlands.																															
Caruthersville	Maximum	76	61	64	58	58	65	69	57	58	66	77	76	70	62	72	85	88	89	86	72	77	82	88	85	78	78	81	84	[illegible]	81
	Minimum	47	41	36	49	44	36	47	39	36	39	45	55	42	44	40	51	55	[illegible]	64	62	44	47	52	69	62	51	55	[illegible]	57	[illegible]
Doniphan	Maximum	75	62	60	56	58	64	63	53	55	65	73	67	60	64	69	78	82	84	77	69	74	78	83	81	76	80	82	72	[illegible]	73
	Minimum	57	40	36	43	44	33	45	36	30	32	41	53	44	32	39	49	52	55	63	59	41	44	51	56	58	52	48	54	65	50
Jackson	Maximum	78	70	60	58	55	60	60	52	55	60	75	69	56	63	65	68	83	85	78	75	74	74	86	85	83	83	79	[illegible]	70	65
	Minimum	51	37	31	42	41	30	43	34	30	32	35	46	36	29	35	47	50	51	61	57	44	42	45	53	55	42	51	50	51	[illegible]
Marble Hill	Maximum	72	67	60	62	63	64	63	60	60	63	76	67	60	59	68	78	85	83	75	78	85	85	84	85	80	70	85	68	70	[illegible]
	Minimum	56	45	30	31	32	32	33	35	30	30	36	42	35	38	40	45	45	52	60	58	37	48	49	50	49	42	59	57	50	45
Poplar Bluff §§	Maximum	70	59	59	56	58	64	63	39	55	65	75	75	59	70	79	79	83	85	74	73	75	79	85	87	76	70	86	76	[illegible]	78
	Minimum	57	39	32	35	42	34	34	39	28	29	32	44	40	33	32	40	45	50	54	58	42	42	44	48	54	44	45	58	48	49
Ozark Plateau.																															
Birchtree	Maximum	73	55	59	54	55	63	54	49	60	61	73	68	57	64	68	75	81	82	71	63	72	81	84	83	76	67	77	73	73	63
	Minimum	50	37	36	42	39	33	44	32	28	34	48	53	38	34	36	47	57	59	58	55	41	48	56	56	48	42	52	52	44	42
Cassville	Maximum	72	57	63	68	73	69	65	51	62	74	74	69	56	63	70	73	71	79	74	70	72	71	80	81	76	70	73	74	61	68
	Minimum	36	33	35	46	37	38	49	32	33	34	41	46	44	32	39	52	52	52	52	51	44	39	44	45	58	42	53	58	44	41
Eldon	Maximum	55	50	49	57	50	55	53	42	56	65	70	57	49	58	57	71	84	77	79	65	71	81	82	79	70	55	52	58	58	[illegible]
	Minimum	36	30	36	35	35	31	40	30	25	32	54	47	33	32	35	43	56	55	62	44	45	40	56	49	44	32	42	49	38	[illegible]
Fruit City	Maximum	60	57	61	55	52	64	59	58	45	64	75	70	55	66	70	76	84	83	76	68	73	82	86	82	81	79	75	67	73	67
	Minimum	40	37	36	40	39	37	45	35	30	37	47	45	37	36	37	47	60	62	62	55	51	49	52	55	53	40	51	52	48	44
Gano	Maximum	71	52	61	58	51	60	55	47	57	64	71	61	49	62	59	73	82	82	85	64	70	79	85	81	70	63	64	63	62	60
	Minimum	41	34	34	43	36	34	44	31	27	35	48	49	34	30	34	44	58	58	58	50	44	50	54	58	47	35	40	42	46	[illegible]
Hollister	Maximum	72	68	70	68	62	64	60	56	68	70	72	62	64	54	68	78	84	78	76	74	78	84	86	82	72	76	82	80	70	62
	Minimum	42	40	38	36	38	32	42	40	30	36	38	48	40	32	40	50	52	54	56	52	38	34	48	44	42	42	54	50	54	[illegible]
Ironton §§	Maximum	71	54	59	58	54	62	59	46	56	65	75	61	53	64	66	75	83	85	76	68	72	80	86	84	70	68	70	60	70	67
	Minimum	57	36	28	34	39	28	38	33	26	29	42	48	36	25	30	42	47	49	58	60	42	38	50	53	52	37	48	50	47	46
Koshkonong	Maximum	71	57	63	54	57	67	56	52	59	67	75	67	57	64	69	77	81	83	72			80	84	85	72	70	79	74	72	68
	Minimum	50	38	37	44	39	48	46	33	29	35	47	52	37	35	40	47	57	58	59			43	53	55	54	44	52	53	46	45
Lebanon §§	Maximum	50	53	60	61	55	60	52	50	60	70	75	55	55	61	62	72	82	80	75	50	70	80	85	87	65	56	58	71	69	58
	Minimum	45	32	32	30	36	32	34	32	24	24	37	50	36	31	32	48	48	60	59	46	38	38	56	56	46	36	35	49	42	42
Mountain Grove §§	Maximum	62	54	58	59	54	60	52	48	51	63	71	57	55	63	65	73	80	79	71	57	69	78	81	77	61	61	71	69	69	58
	Minimum	55	32	33	36	36	30	34	31	26	31	38	48	36	81	34	38	46	56	56	53	40	44	53	55	47	37	44	52	43	44
Neosho	Maximum	76	55	64	66	59	71	68	53	63	69	72	67	56	62	71	76	80	78	73	64	71	80	83	81	80	67	72	73	63	61
	Minimum	39	31	62	50	35	34	49	32	25	35	45	41	43	33	43	52	56	58	57	43	34	45	50	64	50	41	55	56	40	41
Rolla §§	Maximum	62	57	61	59	53	61	51	46	60	68	77	55	56	61	64	75	83	82	78	60	73	80	86	78	67	61	58	63	63	59
	Minimum	52	31	34	34	37	32	31	32	28	39	38	49	34	32	34	46	46	58	58	60	40	45	55	52	47	35	29	47	45	47
Springfield	Maximum	61	52	59	64	54	64	56	48	57	67	72	58	54	61	64	75	79	75	69	61	67	77	82	77	64	58	68	70	59	58
	Minimum	36	33	41	37	34	40	39	33	30	40	51	44	38	37	40	50	59	57	57	43	43	53	59	57	47	39	50	48	39	49
Southwest Plain.																															
Amoret	Maximum	59	51	60	60	60	64	63	48	62	77	66	64	53	56	60	71	77	77	74	65	70	81	85	72	72	60	50	53	54	49
	Minimum	36	28	41	41	32	47	39	29	24	39	46	41	36	34	37	45	56	60	57	42	38	49	56	55	42	33	40	47	37	33
Appleton City	Maximum	68	56	61	66	59	66	63	50	63	72	72	64	54	63	58	75	81	78	75	66	73	81	85	84	75	62	54	69	56	49
	Minimum	38	30	42	43	34	59	43	32	26	40	48	42	36	37	40	47	57	61	58	43	37	50	56	58	44	36	43	49	38	36
Clinton	Maximum	63	57	61	65	68	65	63	52	64	74	73	68	51	63	70	75	83	81	78	65	74	83	86	86	75	66	60	71	59	48
	Minimum	39	31	42	40	34	36	48	32	21	42	48	44	35	35	36	34	57	61	59	44	38	49	53	57	45	35	43	49	[illegible]	35
Harrisonville §§	Maximum	44	58	60	63	58	65	60	45	62	73	70	51	54	59	54	73	79	79	73	49	75	82	87	84	67	50	50	57	48	61
	Minimum	38	28	30	44	33	34	43	30	25	30	42	46	35	34	33	38	50	56	55	43	37	42	56	55	42	33	40	42	38	38
Lamar §§	Maximum	45	57	65	70	61	74	62	56	68	76	76	54	57	67	61	76	84	77	75	56	73	80	86	85	71	55	64	71	58	51
	Minimum	42	30	44	49	34	36	51	33	25	40	49	53	39	36	40	52	57	61	59	44	38	49	55	55	45	30	50	55	38	43
Lamonte	Maximum	55	55	60	60	56	60	52	47	60	71	69	60	52	60	56	72	81	79	76	63	72	80	85	82	63	51	48	67	77	45
	Minimum	37	29	40	38	34	32	46	31	23	40	49	45	35	32	29	45	67	59	59	44	36	51	50	52	41	[illegible]	41	47	38	34
Marshall	Maximum	55	55	61	....	55	59	55	44	57	71	67	61	55	61	53	67	79	80	79	64	73	80	84	83	74	78	48	52	54	[illegible]
	Minimum	36	31	38	..	31	31	37	30	25	57	49	44	33	33	[illegible]	43	45	57	50	44	[illegible]	49	48	49	43	31	44	47	[illegible]	[illegible]
Warrensburg	Maximum	58	57	61	61	53	63	56	47	66	71	70	60	54	60	54	70	81	81	71	64	75	84	88	85	67	56	48	58	56	46
	Minimum	36	31	44	39	33	30	33	34	27	44	49	44	35	33	30	44	56	63	59	44	44	53	54	53	44	38	44	46	38	34
Warsaw	Maximum	61	56	61	64	58	63	61	50	62	71	73	69	58	64	57	75	83	81	77	65	73	84	87	85	77	64	54	68	62	51
	Minimum	38	30	39	45	36	52	50	33	23	41	50	44	37	30	31	42	60	60	56	46	35	47	43	52	45	33	45	50	40	37
Northwest Plateau.																															
Avalon	Maximum	58	55	60	55	57	61	54	44	55	70	68	60	56	57	52	65	65	80	76	66	75	80	80	83	65	50	44	48	47	46
	Minimum	38	30	40	46	38	45	33	33	26	40	45	45	34	38	40	40	42	50	62	45	42	57	60	47	45	33	38	40	38	40
Grant City	Maximum	44	[illegible]	56	54	55	58	54	40	53	70	68	57	53	51	[illegible]	57	77	85	76	67	76	82	75	72	52	[illegible]	41	41	47	45
	Minimum	[illegible]	[illegible]	34	33	31	30	31	24	25	[illegible]	43	36	37	36	29	40	52	62	58	42	40	48	47	45	41	[illegible]	35	37	35	35
Kansas City	Maximum	[illegible]	56	59	56	[illegible]	[illegible]	[illegible]	43	60	72	62	55	55	57	48	72	78	79	74	60	75	83	85	75	60	46	44	50	46	48
	Minimum	[illegible]	34	43	[illegible]	34	44	30	36	30	44	52	43	38	42	39	46	58	65	60	43	45	58	63	51	42	30	44	44	[illegible]	[illegible]
[illegible]	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	44	45	56	[illegible]	66	56	55	56	47	69	78	81	77	48	71	80	72	79	61	50	48	50	47	46
	Minimum	44	28	40	43	[illegible]	39	42	20	28	38	50	40	31	37	32	42	56	60	62	45	42	52	51	45	42	32	44	43	37	37
Lexington §§	Maximum	44	[illegible]	60	60	58	64	56	[illegible]	58	71	64	54	56	58	45	65	80	80	78	48	71	82	84	84	64	50	45	54	47	42
	Minimum	[illegible]	34	40	44	[illegible]	40	[illegible]	36	25	40	[illegible]	44	35	40	[illegible]	44	57	61	59	45	40	52	55	50	44	36	40	44	38	41
[illegible] §§	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	57	61	40	45	55	[illegible]	64	57	58	57	45	61	79	82	77	49	78	85	70	60	54	48	43	44	48	46
	Minimum	[illegible]	[illegible]	[illegible]	40	[illegible]	31	[illegible]	24	25	28	39	34	30	30	29	24	44	55	58	44	37	44	47	44	37	31	33	[illegible]	33	34
Oregon	Maximum	44	[illegible]	[illegible]	[illegible]	[illegible]	60	54	44	54	71	[illegible]	57	54	55	50	64	75	78	74	66	73	81	75	69	57	50	44	44	[illegible]	46
	Minimum	[illegible]	[illegible]	42	[illegible]	[illegible]	44	29	26	26	44	42	37	31	37	30	[illegible]	56	62	59	36	36	50	48	44	39	32	35	37	[illegible]	[illegible]
[illegible]	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	59	72	[illegible]	59	58	56	43	67	79	81	74	62	76	85	75	73	57	48	43	44	45	45
	Minimum	[illegible]	[illegible]	45	36	[illegible]	43	30	29	29	45	48	44	36	40	35	43	58	65	61	40	43	57	52	48	44	35	39	39	37	34
[illegible]	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	54	[illegible]	[illegible]	[illegible]	50	65	66	61	50	54	52	56	75	80	77	71	73	77	70	74	71	51	45	45	50	49
	Minimum	[illegible]	[illegible]	40	[illegible]	43	36	33	27	26	30	58	40	36	40	30	40	53	59	59	44	44	52	50	46	43	36	38	39	37	36

[illegible] 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge

[illegible]


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
F

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR APRIL, 1917, AT THE UNIVERSITY OF MISSO COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 29 and 30.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, northwest; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 BWG iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consist of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standar described in Circular L. Horizontal distance of the anemometer pan, 2 inches. Height of cups of anemometer above rim of pa inches. The instrument shelter is 100 feet southeast of the pan: h. of thermometers above ground, 11 feet. Distance of rain gage from 2.6 feet. The ground in the immediate vicinity of the pan slopes north, average 5 per cent grade. The soil is covered by blue gras being part of the University campus. There are no bodies of water nor are there any irrigation projects under way nearby. The ge topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising of being George Reeder, Meteorologist and Section Director. The obs tions in the table herewith, were taken by Philip G. McGinnis, ass observer, Weather Bureau. This is one of the "Class A" station signed to furnish practical information relative to evaporation. Full complete climatic records have been made at Columbia, Mo., by Weather Bureau for about 28 years. These records are published by are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for April, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Daily evaporation	.187	.053	.131	.163	.020	.124	.153	.030	112	141	.212	.152	068	.112	.111	.018	.109	.129	.139	.127	.110	188	247	.175	174	208	061	.076	.026	.024	...
Daily wind movement	105	96	44	66	101	80	120	105	84	43	56	66	81	50	44	58	48	43	51	82	109	44	56	62	70	86	64	101	73	58	...

*Total in next following measurement. ‡ Indicates minus (−) Observations taken at 6:45

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	5.71	+1.99	0.90	......	15	17	1	12	se.	G. V. Randolph.
Boonville	40	5.51	+1.59	1.08	......	16	13	4	13	se.	C. Randecker.
Cape Girardeau	10	8.97	+5.22	2.80	0.0	11	16	3	11	e.	D. L. Albert.
Chillicothe	2	5.20	−0.07	1.62	1.0	14	11	2	17	.....	Hocey O. Dupy.
Glencoe	0	5.13	....	1.20	0.0	11	14	6	10	s.	Vint R. Neel.
Hermann	43	4.95	+1.42	1.40	......	13	9	7	14	e.	C. T. Maushund.
New Madrid	23	7.25	+2.88	1.85	0.0	13	16	3	11	se.	Miss Josie Smith.
Osceola	......	4.01	....	1.10	.....	10	9[a]	2[a]	18[a]	se.	W. E. Matthews.
Pacific	0	6.05	....	1.75	0.0	12	13	4	13	......	R. C. Dougherty.
Steelville	15	6.66	+2.46	1.35	1.2	14	15	1	14	sw.	Thos. D. Slater.
Tuscumbia	0	3.85	....	1.28	......	12	13	2	15	ne.	C. B. Wright.
Union	0	6.24	....	1.78	T.	14	13	6	11	e.	J. Wm. Keller.
Valley Park	0	5.75	....	1.78	T.	15	13	3	14	nw.	H. J. Lucksinger.
Waverly	2	8.25	....	1.60	......	15	13[c]	0[c]	15[c]	......	J. W. Cauthorn.

05
MS

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

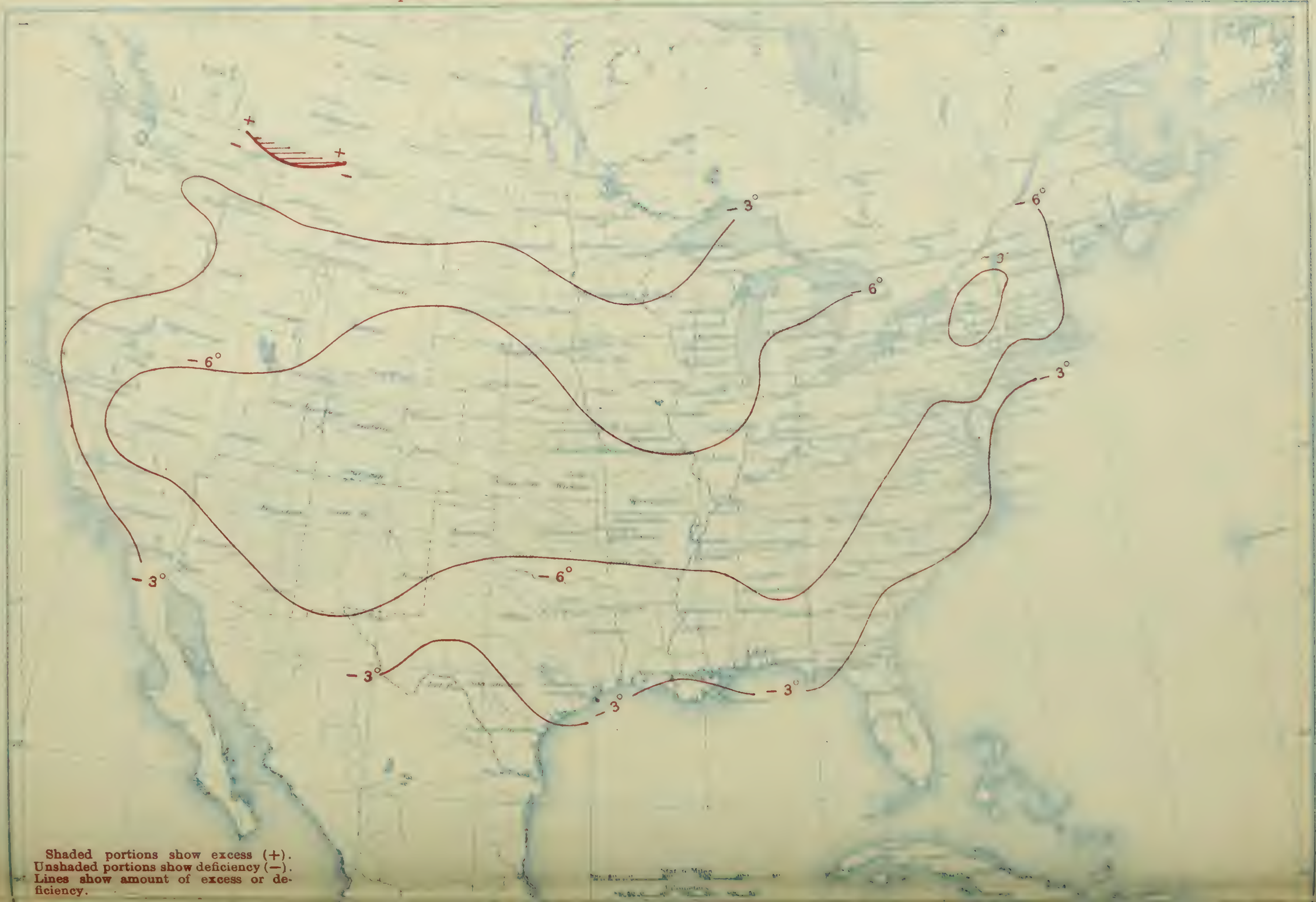
MAY, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JUNE 26, 1917.

Departure of the Mean Temperature from the Normal, May, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (–).
Lines show amount of excess or deficiency.

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXI. COLUMBIA, MO., MAY, 1917. No. 5.

GENERAL SUMMARY.

, 1917, in Missouri, was cool and wet. If we consider w monthly mean temperature for the State as a whole, npared with the normal it was the coolest May in thirty The day temperatures reached or exceeded 90° (91° be- he highest) at not more than twenty stations on two or days only: and in that respect the month had a counter- in May, 1907. The lowest temperature of the present was 30°, occurring at four or more stations on the 5th. at first glance this might be considered unusual, freezing ratures in May are, on the contrary, quite common, as ay see by consulting the table of comparative data in the right-hand corner of this page. In May, 1907, the low- s 17°; and besides widespread freezes during the first r ten days, killing frosts occurred at a few stations as the 27th and 28th. A heavy snowstorm also prevailed e northern half of the State on the 3d; while during the t month snow fell at but one station, on the 1st. The temperatures of April and May, 1907, together, gives a lower by several degrees than the combined means of the wo months of any other year from the beginning of tem- re records in Missouri in 1888 to the present time.

precipitation was frequent but it was not unusual. All f the State received sufficient moisture for present needs, me localities got rather too much for the time being. ructive tornadoes occurred in the southwestern part of arks on the 21st and 28th; and on the 30th a series of oes swept over the eastern Ozark Plateau and northern ds. For detailed description see page 40.

ite the lack of warmth, the frequency of rains, and local , crops and farm work made good progress.

TEMPERATURE.

monthly mean temperature for the State, determined he records of 69 stations, was 58.7°; the mean departure he normal for 63 stations having 10 or more years' rec- s minus 6.2°, the most marked temperature deficiency of y in thirty years. The highest local monthly mean was at Caruthersville, and the lowest was 55.1°, at City. The temperature reached 90° at twenty s, and 91° at seven stations, on two days only, the 17th th, all sections being represented. Freezing or near g conditions were more or less general during the first and especially on the first and fifth days. The 5th was sually cold day, four stations, all in the Ozark Plateau way, experiencing a minimum of 30°.

PRECIPITATION.

average precipitation for the State, 86 stations reporting, 33 inches; the departure from the normal for 74 stations 10 or more years' record was minus 0.47 inch. The itation fell at quite regular intervals and was fairly well uted, except it was somewhat too frequent during the last ys. The greatest local monthly precipitation was 7.12 at Lockwood, and the least was 2.06 inches, at Patton. eatest amount in any twenty-four consecutive hours was nches, at Lockwood on the 25th. At Maryville, 2.18 fell on the 21-22d, and at Jefferson City 2.55 inches fell 28th.

average number of days with 0.01 inch or more precipi- was 10, 1 above normal, 2 less than May 1915, and 2 than May, 1916.

nville, Putnam County, had two inches of snow, on the e only station reporting snowfall.

EVAPORATION.

total evaporation for the month, at Columbia, Mo., was nches; the total rainfall, 4.89 inches; the total wind ent, 1,331, and the mean temperature, 59°. During the month in 1916, these data were, in order named, 4.98 inches; 5.80 inches; 1,178 miles, and 65°. The table for the present month is published on page 40.

WIND.

The prevailing winds were from the northeast. The average movement of wind, 7,450 miles, based upon 8 stations equipped with anemometers, was slightly in excess of the normal. Fresh to strong winds prevailed on several days, the highest being 50 miles an hour, from the south, at St. Louis on the 30th.

SUNSHINE AND CLOUDINESS.

Notwithstanding the general opinion that the month was a cloudy one, owing to frequent showers, the average number of hours of sunshine for the State was 285, or about 63 per cent of the possible, and about 2 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense—11th, and 14th.

Frosts, light—1st, 5th, 6th, 7th, 8th, 9th. and 23d.

Heavy—1st, and 5th. Killing—1st, and 5th.

Hail—3d, 10th, 25th, 27th, 29th, and 30th.

Halos, solar—2d, 5th, 6th, 7th, 9th, 10th, 11th, 16th, 18th, 19th, 20th, 24th, 25th, 27th, 29th, and 31st. Lunar—2d, and 5th.

Thunderstorms—2d, 3d, 4th, 20th, 22d, 24th, 28th, and 31st; and more or less general and severe on the 21st, 25th, 26th, 27th, 29th, 30th.

Tornadoes—21st, and 27th in the southwestern Ozarks, and on the 30th in the eastern Ozarks.

ERRATA FOR APRIL, 1917.

Amoret: Precipitation on the 8th should be T. Dean: Mean minimum temperature should be 44.6; and the monthly mean, 56.8.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
								Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.94	82	......	291	66	6,151	8.3	31	sw.	26
Hannibal	29.93	76	......	......	......	7,218	9.7	34	ne.	3
Kansas City	29.94	74	54	266	60	8,828	11.9	40	e.	27
St. Joseph	29.94	77	54	307	69	6,141	8.3	33	nw.	26
St. Louis	29.93	76	64	314	71	9,917	13.3	50	s.	30
Springfield	29.95	78	54	257	58	7,916	10.6	35	w.	30
Cairo, Ill	29.94	76	60	......	......	7,497	10.1	42	s.	30
Keokuk, Iowa	29.95	74	55	302	68	5,936	8.0	33	sw.	26

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	62.1	−2.3	93	30	5.35	+0.58	......	0.0	5	.....	.....	.....
1889	63.5	−0.9	96	28	6.56	+1.79	......	0.0	5	.....	.....	.....
1890	62.8	−1.6	96	32	3.47	−1.30	......	0.0	6	.....	.....	.....
1891	61.5	−2.9	97	28	4.26	−0.51	......	0.0	8	.....	.....	.....
1892	60.7	−3.7	91	28	7.80	+3.03	3.90	0.0	17	5	9	17
1893	61.8	−2.6	94	30	5.89	+1.12	5.83	0.0	10	11	11	9
1894	63.7	−0.7	95	22	3.99	−0.78	4.20	0.0	8	13	11	7
1895	64.6	+0.2	103	28	4.08	−0.69	3.43	0.0	9	13	12	6
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	0.0	12	12	12	7
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	0.0	7	16	11	4
1898	65 2	+0.8	97	31	7.90	+3.13	5.50	0.0	14	12	10	9
1899	66.9	+2 5	96	34	6.26	+1.49	5.28	0.0	12	10	13	8
1900	66.3	+1.9	97	29	3.69	−1.06	4.00	0.0	10	14	11	6
1901	63 8	−0.6	98	30	1.47	−3.30	3.04	0.0	6	15	10	6
1902	69.4	+5.0	98	39	5.03	+0.26	4.35	0.0	11	13	11	7
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	0.0	15	9	10	12
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	0.0	12	13	10	8
1905	64.9	+0.5	94	34	4.87	+0.10	4.55	0.0	10	12	11	8
1906	66.3	+1.9	98	27	2.16	−2.61	3.83	0.0	7	15	10	6
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	0.0	10	14	6	11
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	0.0	12	12	10	9
1909	63.3	−1.1	96	23	5.34	+0.57	5.26	0.0	9	15	9	7
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	0.0	13	11	8	12
1911	68.8	+4.4	101	27	1.55	−3.22	2.06	0.0	5	19	7	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	0.0	7	18	8	5
1913	65.8	+1.3	101	33	3.05	−1.93	2.95	0.0	8	16	7	8
1914	66.6	+2.0	98	31	1.47	−3.40	3.00	0.0	5	17	9	5
1915	63.7	−1.4	97	30	7.86	+3.04	7.10	0.0	12	12	7	12
1916	65.6	+0.7	96	33	5.61	−0.89	4.10	0.0	11	15	8	8
1917	58.7	−6.2	91	30	4.33	−0.47	2.60	0.0	10	15	7	9

Climatological data for May, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observer
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip., .01 of an inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	652	36	58.0	−6.1	89	18	35	1	33	5.25	+0.39	1.25	0	13	17	3	11	n.	Louis Benecke.
Clifton Hill	Randolph	731	....	58.6	5.6	89	19	34	5	33	2.93	−2.37	0.89	0	13	13	9	9	.....	[illegible]
Columbia	Boone	784	26	58.6	−5.9	89	19	34	8	34	4.89	+0.03	1.87	0	11	12	7	12	sw.	U. S. Weather B
Fayette	Howard	725	31	58.0	−6.5	87	18	35	5	31	4.32	−0.29	1.10	0	12	.	.	.	....	Prof. T. B. [illegible]
Fulton	Callaway	818	12	58.4	−6.7	90	18†	31	5	39	5.05	+0.17	1.83	0	16	23	4	4	n.	Dr. O. M. [illegible]
Gorin	Scotland	700	27	......	......	......	......	......	......	....	1.43	+0.02	1.01	0	9	9	11	11	ne.	J. W. [illegible]
Hannibal	Marion	534	23	58.6	−5.8	88	19	36	4	33	3.83	−1.17	1.09	0	12	12	10	9	sw.	U. S. Weather B
Jefferson City	Cole	557	30	59.2	−6.0	89	19	35	5	34	6.78	+2.44	2.55	0	11	22	1	8	n.	Miss [illegible]
Keytesville	Chariton	660	3	......	......	......	......	......	......	....	3.77	....	0.87	0	12	....	..	..	.....	J. T. [illegible], M.
Kirksville	Adair	969	24	56.8	−5.6	86	18†	33	5	31	3.95	−1.31	0.78	0	10	6	17	5	s.	Mary Burrows.
Louisiana	Pike	469	38	59.2	−4.7	87	19	36	7	36	5.94	+1.57	1.60	0	15	18	4	9	ne.	[illegible]
Macon	Macon	875	18	57.2	−6.9	87	18†	32	1	31	6.56	+2.09	2.27	0	9	12	9	10	sw.	John A. Cook.
Mexico	Audrain	797	38	58.4	−6.1	90	18	32	5	36	5.20	+0.52	1.35	0	9	19	12	6	w.	R. M. [illegible]lyn.
Oakfield	Franklin	500	35	59.6	−6.1	90	19	35	5	33	3.36	−1.79	1.09	0	12	6	17	8	ne.	L. L. [illegible]
Palmyra	Marion	652	4	58.8	−7.6	87	18†	33	5	37	4.12	−0.58	0.94	0	10	20	2	9	sw.	W. B. [illegible]
St. Catherine	Linn	850	3	56.8	......	85	19	32	5	39	3.26	....	0.87	0	14	9	15	7	ne.	L. D. Baker.
St. Charles	St. Charles	456	38	59.1	−3.3	89	19	35	6	35	4.34	+0.08	1.36	0	9	10	14	7	sw.	L. C. [illegible]
St. Louis (1)	St. Louis City	717	45	60.6	−5.9	90	19	38	5	26	3.78	−0.46	1.31	0	12	9	15	7	n.	U. S. Weather B
St. Louis (2)	do.	578	4	60.0	......	90	19	38	5	26	3.95	....	1.29	0	11	12	13	6	n.	St. Louis Univer
Shelbina	Shelby	779	24	......	......	......	......	......	......	....	3.19	−1.97	1.05	0	6	....	....	....	....	S. G. [illegible]
Steffenville	Lewis	650	23	56.4	−7.9	91	17†	31	5	49	3.73	−1.31	0.96	0	8	10	14	7	ne.	Frank Hall
Unionville	Putnam	1,072	23	55.3	−7.3	86	18	32	6	32	5.65	−0.22	1.80	2.0	10	13	10	8	nw.	Geo. W. Davis.
Warrenton	Warren	865	25	59.2	−5.9	91	19	31	5	31	4.21	−0.42	1.09	0	14	7	14	10	ne.	Prof. J. H. Frick
Section means and extremes		....	....	58.3	−6.2	91	17†	31	5	49	4.46	−0.15	2.55	0.1	11	13	10	8	ne.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	F. E. Tate.
Caruthersville	Pemiscott	220	25	61.9	−4.4	91	31	41	1†	10	2.32	−1.62	0.72	0	8	19	5	7	w.	H. L. Averill.
Doniphan	Ripley	344	11	61.7	−5.1	86	26†	38	1†	38	3.16	−0.61	1.20	0	9	17	4	10	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	60.2	−5.6	86	19	31	7	32	3.63	−0.65	1.17	0	7	10	10	11	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	57.4¹	−8.7	......	......	37	6	....	......	......	......	0	....	8	7¹	4	......	Dr. A. F. Hendri
Patton (near)	Bollinger	500	1	......	......	......	......	......	......	....	2.06	......	1.00	0	5	19	0	12	s.	George F. Ellis.
Poplar Bluff	Butler	339	12	60.6	−8.1	86	26	35	23	39	2.43	−2.56	0.85	0	8	12	6	13	......	Miss Belle Kinre
Sikeston	Scott	328	15	61.8	−7.0	84	18	37	6	35	2.12	−2.64	0.87	0	8	11	14	6	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	61.8	−5.7	86	31	41	5	27	1.72	−2.11	0.73	0	8	11	7	13	n.	U. S. Weather B
Section means and extremes		....	....	61.2	−6.4	91	31	31	7	40	2.49	−1.70	1.20	0	8	14	7	10	sw.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	60.0ᵇ	−5.4	85	25	35	5	34	4.09	−0.04	1.10	0	7	21	4	6	s.	V. H. Kirkendall
Bolivar	Polk	1,071	28	57.4	−7.7	82	17†	32	5	32	5.02	−0.29	1.08	0	8	22	3	6	ne.	A. C. Fink.
Cassville	Barry	1,500	5	57.6	......	84	31	31	8	38	5.39	−0.36	1.43	0	8	19	5	7	sw.	Mrs. Zuma Bloo
Crocker	Pulaski	1,126	5	58.8	−6.9	90	19	33	5	33	4.79	....	1.90	0	7	23	5	3	s.	Roy W. Reed.
Dean	McDonald	1,000	17	60.0ᵃ	−6.0	87	19	30	1†	41	5.16	−1.14	1.50	0	8	15	3ᵇ	11ᵇ	......	H. E. Dean.
Eldon	Miller	934	15	58.5	−6.6	89	18	30	5	38	6.52	+1.77	2.00	0	11	8	10	13	ne.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	61.6	......	87	19	38	23	37	4.55	+0.15	1.25	0	8	17	7	7	e.	R. C. Walton.
Gano	Dent	1,250	12	58.8	−7.0	90	19	32	5	33	3.60	0.71	1.28	0	8	17	6	8	nw.	A. C. Leach.
Goodland	Iron	1,000	11	57.7	−7.2	87	19†	32	5†	42	5.10	+0.76	2.38	0	9	17	7	7	w.	F. M. Adams.
Hollister	Taney	735	7	59.6	−7.9	90	26	36	1†	44	5.84	+0.89	1.70	0	7	16	0	15	sw.	W. P. Chapmann
Houston	Texas	1,280	23	59.4	−5.5	88	30	33	5†	40	2.25	−2.20	0.73	0	5	18	7	6	nw.	R. F. Harmon.
Ironton	Iron	925	33	58.5	−9.1	87	19	33	6	42	3.81	−0.93	1.10	0	11	5	18	7	ne	W. H. Delano.
Koshkonong	Oregon	958	15	60.2	−6.8	85	18†	36	5	33	4.72	+0.29	1.30	0	8	13	5	13	ne.	R. M. Hitt.
Lebanon	Laclede	1,265	27	58.0	−8.0	89	18†	31	5†	40	5.83	+0.32	1.35	0	12	21	2	8	s.	Leonard E. Dick
Lockwood	Dade	1,078	21	60.0	−4.5	88	18	35	1†	31	7.12	+2.35	2.60	0	10	14	6	11	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	57.2	−7.2	84	19	34	5†	35	3.43	−1.22	0.58	0	11	11	10	10	sw.	Mo. Fruit Exp. S
Mount Vernon	Lawrence	1,480	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	C. L. White.
Neosho	Newton	1,011	33	59.4	−6.9	86	18	30	8	39	5.64	−0.42	1.66	0	10	17	6	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	59.0	−5.6	90	18	33	5	38	3.70	−1.40	0.92	0	8	15	12	4	n.	Prof. Elmo G. H
Springfield	Greene	1,350	28	59.1	−5.5	85	19	39	5	24	3.90	−1.65	1.02	0	13	13	12	6	se.	U. S. Weather B
Section means and extremes		....	....	59.0	−6.7	90	18†	30	1†	44	4.08	−0.21	2.60	0	9	16	7	8	sw.	
Southwest Plain.																				
Amoret	Bates	831	7	56.2	−7.6	84	20	32	1	31	4.91	−0.53	1.35	0	8	10	8	13	sw.	Darby Fruit Fa
Appleton City	St. Clair	873	25	59.6	−5.7	88	18	33	1	32	6.30	+0.63	1.37	T.	9	14	9	8	ne.	W. G. Bigelow.
Clinton	Henry	765	29	59.9	−5.3	91	18	34	5	37	4.13	−1.36	1.20	0	7	13	9	9	sw.	A. E. Derwent, M
Harrisonville	Cass	912	43	57.4	−6.7	87	19	33	1	35	6.23	+1.47	1.53	0	13	14	4	13	sw.	A. J. Sharp.
Lamar	Barton	980	35	60.6	−5.4	89	18†	33	1	37	6.28	+0.92	1.12	0	12	14	9	8	sw.	Joe W. Springer
Lamonte	Pettis	863	27	56.9	−8.6	89	18	32	1†	38	5.30	+0.37	1.80	0	9	16	7	8	sw.	J. Ed. Hall.
Marshall	Saline	779	25	58.5ᵃ	−5.7	87	18†	35	1†	39	4.06	−0.94	1.20	0	9	14	7	10	sw.	Prof. W. H. Blac
Nevada	Vernon	860	22	59.5	−5.3	89	18	33	1	34	6.05	+0.33	1.25	0	8	16	7	8	ne.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	59.3	−6.1	91	18	36	1†	31	4.11	−0.52	0.93	0	10	15	8	8	sw.	Geo. H. Collins.
Warsaw	Benton	687	11	58.6	−7.4	90	18	30	5†	44	5.06	−0.11	1.15	0	11	12	15	4	w.	J. R. Smith, M. D
Section means and extremes		....	....	58.6	−6.4	91	18	30	5†	44	5.24	+0.03	1.80	0	9	14	8	9	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	59.6	−3.6	88	19	35	5	28	4.65	−0.50	1.10	0	10	16	8	7	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	56.6	−5.8	88	19	32	5†	40	2.87	−2.18	0.94	0	11	11	10	10	ne.	M. H. Moulton.
Conception	Nodaway	982	31	57.5	−4.2	90	19	33	1†	32	3.42	−1.21	0.94	0	10	10	17	4	ne.	Fr. Adelhelm He
Gallatin	Daviess	803	16	......	......	......	......	......	......	....	2.94	−2.79	0.60	0	12	17	2	12	n.	Robert R. Wynn
Grant City	Worth	1,131	23	55.1	−7.0	86	19	33	4	40	2.66	−1.97	0.65	0	8	18	1	12	nw.	W. H. Campbel
Kansas City	Jackson	963	27	58.8	−5.7	86	18	37	5	25	5.74	+0.63	1.33	0	11	15	5	11	n.	U. S. Weather B
Kidder	Caldwell	1,020	25	58.0	−5.0	88	19	31	1†	27	4.05	−1.41	0.92	0	11	19	4	8	sw.	J. F. Sharp.
Lexington	Lafayette	688	31	59.2	−5.3	90	19	35	5†	33	3.90	−1.24	0.93	0	9	19	1	11	w.	J. W. Keithley.
Liberty	Clay	864	27	59.2	5.5	91	19	34	5	31	5.18	−0.06	1.16	0	9	18	3	10	sw.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	56.2	−4.8	89	17	32	1†	38	4.76	−0.99	2.18	0	12	19	4	8	n.	J. R. Brink.
Oregon	Holt	1,048	60	55.9	7.4	85	19	32	1†	29	2.82	−2.04	0.93	0	7	14	6	11	ne.	Tom Curry.
St. Joseph	Buchanan	967	11	58.3	......	90	19	35	5	23	3.22	−1.04	0.94	0	11	15	9	7	ne.	U. S. Weather B
Tarkio	Atchison	976	4	57.2	−6.4	91	19	31	5	35	3.95	−0.65	1.54	0	9	17	5	9	ne.	John F. Frazier
Trenton	Grundy	822	21	58.0	5.9	87	19	34	5	34	2.89	−2.46	0.73	0	9	18	2	11	n.	W. H. Estes.
Section means and extremes		....	.	57.1	5.6	91	19	31	5	40	4.08	−1.28	2.18	0	10	16	6	9	ne.	
State means and extremes		....	....	58.7	6.2	91	17†	30	5†	49	4.33	−0.47	2.60	0	10	15	7	9	ne.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re
used in determining section or division means.

Figures and letters appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on earlier dates. ‡‡ Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Paci
[illegible] of Dean, Anderson, of Gano, Salem, R. F. D. No. 5.

Daily precipitation for May, 1917.

Stations.	Watersheds.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
rtheast Plain.																																	
ville	Missouri	1.06		.15	.20	T.													.21			.91	1.58	.05			.03		.98		.09	.58	[illegible]
swick	Grand	1.25		.10	.31						.06	.24										.30	.68	.07			.46	.40	.59		.11	.68	[illegible]
Hill	Chariton		.03	.08	.14				.01		.10										.05	.89	.12			.02	.30	.59	.03		.57		[illegible]
mbia**	Missouri		.08	.14	.05			T.	T.		.04	T.	.04					.35			.87	1.01	.70			.04	T.	.70	.01	.04	.82		[illegible]
[illegible]	do		.15	.07	.09						.03							.36			.56	1.10	.28			.10		.71		.04	.83		[illegible]
[illegible]	do		.06	.06	.06	T.				T.	.08	.02	.02	.01					.05		.07	1.83	.53		T.	.02	T	.75	.18		.73	.28	[illegible]
[illegible]	Meramec	.26		.09	.18	T.						T.							.05			.03	.06				.01	.01	.60		.06	.06	1.11
[illegible]	Mississippi			.32	.70				.01		.39											.81	.64				.25	.30			1.01		[illegible]
dal**	do		T.	.07	.23		T.	T.	T.	T.	.19		T.					T.			.38	.71	.13	T.		.46	.01	.60		.16	.88	.01	[illegible]
[illegible]	Missouri	.27		.07	.31	.02				.01		.09		T.					.04			.56	.81	.04			.03	.02	1.20		.03	.65	[illegible]
son City	do	.57		.07	.45	.01																.76	.76	.02			.17	.10	2.55			1.32	[illegible]
sville	Chariton		.07	.12	.14						.15										.15	.18	.47			.75		.87	.08	.03	.46		[illegible]
sville	Mississippi		.01	.57	.52								T.									.78	.71				.08	.44	.03		.71	.10	[illegible]
[illegible]	do	.03	.07	.12	.22				T.	.10	.08	.12							.62			1.60	.26				.44	.08	.80		1.10	.30	[illegible]
[illegible]	Chariton	1.75		.04	.51	T.						T.										.39	2.27				.30		.45		.37	.48	[illegible]
[illegible]	Mississippi			.05	T.	.03		T.				.09							.43			.85	1.35				T.		1.30		.65	.15	[illegible]
[illegible]	Meramec	T.	.27	.05				.03				.07							.26			1.09	.08			T.	.26	.20	.48		.53	.04	[illegible]
[illegible]	do	.25		.13	.31				.02	T.		.03	.03						.22			.26	1.20	T.			.01	.01	.56		.03	.39	[illegible]
[illegible]	Mississippi	.94			.31	.02						.02										.47	.81				.33		.50		.42	.27	[illegible]
[illegible]	Grand		.03	.20	.18						.02										.07	.60	.04			.18	.06	.74	.03	.17	.87	.07	[illegible]
[illegible]	Missouri		T.				.23				.02	.16							.10			.95	.21			T.		.50	1.36		.81		[illegible]
(1)**	Mississippi		.02	.18	.09			T.	T.		.01	.06							.04		T.	.87	.03			.05		.94	.37		1.12		[illegible]
(2)	do		.02	.21	.10			.03	T.		.01	.07							.05		.02	.91	.04			.05		.87	.28		1.29		[illegible]
[illegible]	do				.37																	1.05	.05			.42		.40			.90		[illegible]
ide	do		T.	.20					T.		T.	.60									T.	.60					.32	.85	.10	T.	.96	.10	[illegible]
[illegible]	Meramec	.29		.09	.39	.02						.08	.02						.29			.45	.50	.02			.45		.70		.10	.79	[illegible]
[illegible]	Grand	1.50		.50	1.30	.06						.30										.50	.45				.06				.08	.90	[illegible]
Park	Meramec	.26		.10	.23	.02				T.		.09	.03						.03			.22	.66	.02			.02		1.46		.15	1.43	4.72
[illegible]	Mississippi	.28		.08	.17				.08	T.		.15	.05						.16			.32	1.04	.03			.03		1.09		.05	.68	[illegible]
east Lowlands.																																	
rardeau	Mississippi	.25			.40				.02													.03	1.05				.02		.60			1.10	3.47
[illegible]	do			.28	.50			.12				.05											.72		T.	.15	.45	.05	T.		T.		[illegible]
an	Black			1.20	.65			T.				.08									T.	.10	.35			.38	.15	.15			.20		3.16
n	Mississippi		.20	.53				.03														1.17	.20					.85			.65		[illegible]
Hill	do																																
[illegible]	do	.35		.30	1.10								.10										.70	.05			.58		.71			.02	[illegible]
[illegible]	do						.10		.20																.50	1.00				.26			[illegible]
Bluff	Black	.20		.30	.85	T.			.03				T.	T.								T.	.75	T.		T.	.15		.11			.04	[illegible]
[illegible]	Mississippi			.20	.51				T.			.01	T.										.87				.10	.33	.09			.01	2.12
[illegible]	do			.46	.01			T.		T.		T.									T.	.73	T.			.04	.12	.27	.05		.04		1.72
Plateau.																																	
[illegible]	Gasconade	.35		T.	.35	.17			T.													.30	.83	T.			.27	.11	.98		T.	.95	4.31
well	Meramec																																
[illegible]	Black			.54	.52																	.93			.39	.08	1.10				.53		[illegible]
er	Osage			1.08	.26																	1.60	.50	.25		.62		.31			1.60		[illegible]
ille	White	1.05	.25																	.83	.88					1.43	.06	.31			.58		[illegible]
er				1.07	.03																.60				.73			.03			1.90	.43	4.79
[illegible]	Neosho			1.50	.41							.06									.55	.79				.97		.37			.51		5.16
[illegible]	Osage			.35	.05																.34	1.80	.20			.30	.36	2.00	.35		.75	.02	6.52
City	Black			.21	1.01							T.										1.07	.12			.24	.10	.55				1.25	4.55
[illegible]	Meramec			.06	.16							T.										1.13	.15			.13		.84	.27		.86		3.60
and	Black			.25	.45			.05														2.38	.09			.10	.05	1.15			.58		5.10
ster	White			1.40	.44																	.30	.80			1.70		.20		1.00			[illegible]
[illegible]	Gasconade			.36	T.			T.													T.	.51	T.			.35		.73	T.		.30		2.25
[illegible]	Mississippi	.15		.05	1.10				T.			T.	T.									.20	.63	.03			.10	.55	.55		.25	.20	3.81
[illegible]	Black			1.22	.52							T.									T	1.30			.08	1.02	.02	.17			.39		4.72
[illegible]	Osage	.55		.14	.36	T.			T.			T.	T.									.88	1.15	.04		.10	.36	.23	.62		.05	1.35	5.83
[illegible]	do			.84	.09							.25									.40	1.16	.20			2.60		.58	.10		.90		7.12
in Grove	White	.35		.15	.58								T.									.23	.53	.04		.23	.20		.54		.42	.16	3.43
[illegible]	Neosho																																
[illegible]	do			.83	.21							.08									.65	.69	T.		.03	1.66		.62	.06		.81		5.64
[illegible]	Meramec	.41			.40	.04																.16	.76				.23		.78			.92	3.70
[illegible]**	White		.02	.57							T.	.08						.02			.45	.69	.02	.02	.07	.54		.74	.02		.66		3.90
[illegible]	Meramec																																
mbia	Osage	.58		.08	.21																	.65	.46				.85		1.25		.37	.45	4.90
west Plain.																																	
[illegible]	Osage			.10	.06						T.					T.	T.	T.			.60	.75	.55			.65		.85		T.	1.35		4.91
on City	do			.51	.03	T.				T.	T.							T.			.95	.90	1.37	T.		.37	.93	.67	T.		.57		6.30
[illegible]	do				.12																.88	1.15	1.20			.25		.17			.37		4.13
sville	do	.60	T.	T.	.10	.02						.03						.05				.57	1.08			.12	.58	.22	1.53		.15	1.18	6.23
[illegible]	Neosho	.20		.19	.41							.07										.98	.93			1.12	.43	.22	.52		.65	.58	6.28
ale	Missouri		T.	.12	.13						T.							T.			.46	1.80	.35			.33		1.21	T.	.20	.70		5.30
all	do		.20	.05	.17				T.		T.										.35	.36	.60			.20	T.	1.20	T.	T.	.93	T.	4.06
[illegible]	Osage			.42																	.98	1.12				.82	1.25	.45	.17		.84		6.05
nsburg	Missouri		.63	.11	.10						T.										.76	.79	.44			.26		.58		.11	.93		4.11
[illegible]	Osage			.18	.10						T.						T.	T.			.45	1.15	1.10			.26	.33	.76	.05		.65	.05	5.06
[illegible]	Missouri	.89	T.	.18	.24	T.			T.	T.		T.										.66	1.03	.28			.54	T.	.96		.03	.67	5.48
west Plateau.																																	
[illegible]	Grand			.05	.53						.17										.35	.75	.25			.60		.90		.25	.80		4.65
[illegible]	do	.03	.05	.24	.24			T.	.01	T.	T.										.15	.53	.40			T	.18	T.		T.	.94	.10	2.87
[illegible]	do	.75	.01	.03	.28	.01																.74	.37	.02			.24		.90		.15	.85	4.35
[illegible]	Missouri		.11	.28	.03						.06										.10	.94	.65			.65		T.		.09	.51		3.42
[illegible]	Grand		.10	.26	.13				T.		.05										.10	.47	.19			.30	.24	.32	T.	.13	.60	.05	2.94
t City	do		.14	.31	.28							T.									.65	.23	.30			.34	T.			T.	.41	T.	2.66
City**	Missouri		.14	.51	.01			.07													.54	.84	.04			.89		1.31		.38	1.01		5.74
[illegible]	Grand	.92	.02	.18	.28							.01										.50	.25				.52		.54		.18	.65	4.65
gton	Missouri	.75		.15	.20																	.56	.33				.25		.93		.05	.68	3.90
[illegible]	do		.15	.30	.28																.50	.38	.80			.23		1.28		T.	1.46	T.	5.18
[illegible]	do	.32		.20	.15	.01						.30										.22	2.18	.05			.45			.03	.25	.30	4.76
[illegible]	do		.15		.38						T.										T.		.87			.22		.20		.07	.93		2.82
[illegible]**	Missouri		.28	.06	.02			T.		T.	.01										.37	.77	.16			.31	T.	.40		.13	.81		3.22
[illegible]	do		.14	.41	.03						.01										.10	.24	.85			.63					1.54		3.95
[illegible]	Grand		.27	.48							T.										.73	.50				.20		.23		.15	.18	.15	2.89

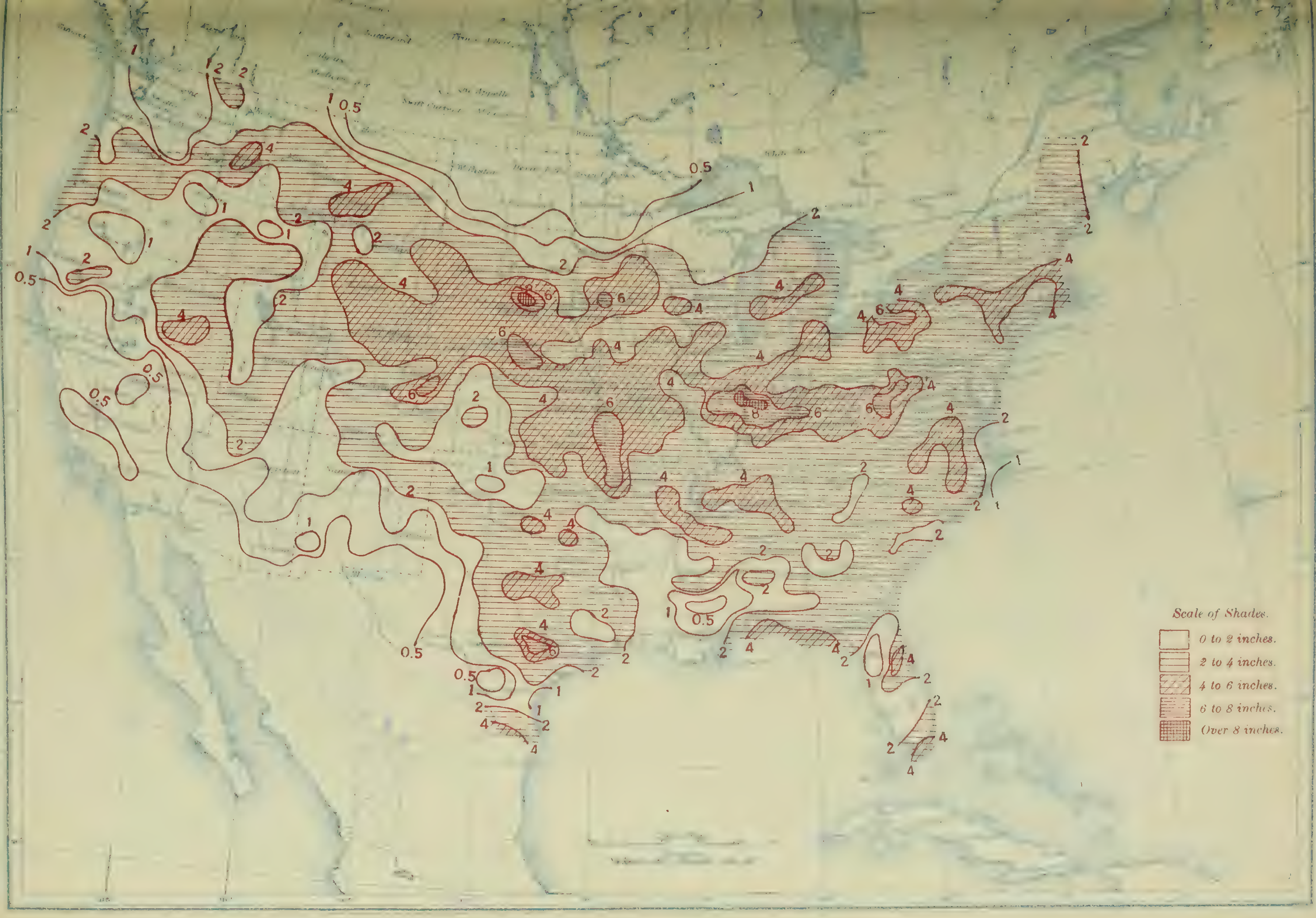
Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded.

Daily temperatures for May, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	65	52	48	50	61	60	61	67	72	67	69	72	67	73	76	81	82	89	88	81	70	52	67	74	70	77	60	70	73	68	
	Minimum ...	35	38	45	39	37	37	38	38	41	45	39	43	43	48	43	48	57	58	66	62	62	44	45	51	51	51	54	55	52	51	
Columbia	Maximum...	59	49	50	47	57	57	56	66	70	67	66	69	69	72	77	82	85	89	89	81	71	63	66	73	68	82	61	69	75	72	
	Minimum ...	38	45	47	39	35	40	40	34	46	48	47	41	43	41	43	48	59	63	67	62	60	42	41	46	55	61	52	54	53	60	
Fayette	Maximum...	59	48	48	46	56	55	56	68	70	66	67	70	70	74	76	80	83	87	86	80	69	58	66	72	66	80	58	70	74	68	
	Minimum ...	36	41	46	36	35	38	38	39	47	48	45	44	45	46	47	49	58	61	67	62	58	42	40	48	52	60	53	53	52	60	
Hannibal	Maximum...	58	56	50	46	56	54	57	67	69	66	66	66	64	69	77	81	85	87	88	81	72	64	67	73	69	85	65	71	73	72	
	Minimum ...	40	46	42	36	37	38	40	39	45	49	47	47	46	43	45	48	58	66	65	62	62	42	40	47	47	60	54	52	54	58	
Jefferson City §§	Maximum...	62	59	51	44	59	58	56	67	73	69	69	71	70	72	78	81	85	88	89	82	74	50	68	76	72	85	68	72	77	73	
	Minimum ...	37	40	45	40	35	38	40	39	46	47	47	42	44	44	44	49	53	62	64	63	59	50	40	47	52	58	53	53	51	57	
Kirksville	Maximum...	51	51	47	49	56	54	58	67	71	64	66	66	64	67	75	79	82	86	86	81	70	63	67	72	68	78	67	69	71	71	
	Minimum ...	35	42	38	35	33	36	36	37	44	45	45	45	44	43	45	50	60	58	66	59	55	41	36	44	46	56	55	49	50	50	
Louisiana	Maximum...	60	57	50	50	57	56	57	66	70	68	66	66	68	70	78	80	85	85	87	86	83	68	67	74	70	83	75	76	73	70	
	Minimum ...	37	42	43	38	37	38	36	38	42	45	46	42	42	38	42	44	53	80	80	80	60	44	38	48	42	58	48	52	48	60	
Macon §§	Maximum...	56	58	46	50	58	57	61	66	70	68	68	70	67	71	75	82	83	87	87	81	70	50	66	73	68	80	65	70	73	68	
	Minimum ...	32	37	41	35	33	35	35	39	43	48	44	42	44	45	46	51	58	60	65	59	59	42	39	43	52	52	50	51	50	50	
Mexico §§	Maximum...	61	50	50	45	49	57	58	68	73	72	64	68	70	70	78	83	86	90	89	84	74	78	68	75	69	83	64	71	76	74	
	Minimum ...	36	39	44	38	32	36	36	37	45	47	41	41	43	44	42	47	55	60	64	62	59	46	40	45	50	61	51	50	52	59	
Oakfield	Maximum...	62	58	51	49	58	57	56	68	74	70	67	67	70	70	78	82	87	86	90	82	80	65	67	75	70	85	71	69	75	71	
	Minimum ...	38	45	45	38	35	38	39	39	46	49	50	41	47	41	45	54	58	59	63	62	60	43	39	48	53	50	54	50	50	61	
St. Catharine	Maximum...	57	51	48	49	57	57	57	67	70	70	66	67	67	70	74	79	79	84	85	80	69	61	67	73	67	77	67	70	71	67	
	Minimum ...	34	41	38	36	32	35	35	37	42	43	44	44	43	42	44	49	57	58	64	61	55	41	38	45	48	57	52	51	52	57	
St. Louis (1)	Maximum...	62	58	51	46	54	54	54	66	70	68	65	65	65	67	76	83	85	84	90	82	80	64	66	73	71	87	70	69	75	71	
	Minimum ...	41	49	46	39	38	41	42	45	50	52	50	47	51	50	57	58	60	62	67	66	61	42	42	52	61	61	55	51	57	62	
Unionville §§	Maximum...	54	50	42	50	52	56	62	66	68	66	65	68	70	73	75	80	82	86	85	80	68	56	65	72	77	76	57	72	73	68	
	Minimum ...	32	35	39	33	29	32	34	36	40	44	40	41	40	42	45	48	52	57	60	58	53	39	38	41	42	46	52	46	47	50	
Warrenton §§	Maximum...	60	52	49	44	47	56	57	66	70	68	65	68	70	70	81	81	89	88	91	83	80	57	66	74	71	87	66	70	77	73	
	Minimum ...	38	41	45	41	34	38	38	39	46	49	47	42	48	43	49	54	58	60	62	62	61	55	39	46	53	61	53	51	54	58	
Southeast Lowlands.																																
Caruthersville	Maximum...	77	79	71	62	68	64	60	71	73	76	71	75	75	76	83	86	88	89	89	80	86	80	70	78	76	87	85	80	83	84	91
	Minimum ...	41	47	52	50	42	42	47	42	42	52	52	47	49	46	43	50	52	57	61	57	62	55	41	49	59	65	67	59	53	64	
Doniphan	Maximum...	70	70	67	66	63	60	56	69	70	72	70	70	72	74	78	81	84	84	84	80	80	75	70	74	70	86	81	74	79	80	
	Minimum ...	38	44	49	45	40	39	45	38	38	51	49	45	47	43	42	48	46	56	62	54	65	51	38	46	57	60	66	58	48	62	
Jackson	Maximum...	68	74	70	60	58	58	57	67	72	72	68	68	68	70	80	83	83	85	86	84	82	80	69	77	73	82	79	72	80	80	
	Minimum ...	36	41	50	40	38	36	31	36	37	47	45	39	40	28	39	44	45	54	61	54	64	50	36	42	55	62	61	54	46	63	61
Marble Hill	Maximum...	68	70	70	58	60	59	60	60	72	70	67	70	72	....	....	....	....	....	....	....	....	....	....	....	....	85	80	72	76	70	
	Minimum ...	40	40	50	42	36	37	35	42	39	41	45	41	41	....	....	....	....	....	....	....	....	....	....	....	....	65	57	52	46	50	
Poplar Bluff §§	Maximum...	69	73	60	57	65	66	65	69	72	72	68	73	73	75	80	82	84	84	85	82	80	69	70	74	71	86	63	84	77	80	
	Minimum . .	37	49	42	48	40	38	44	39	46	44	46	45	45	42	41	45	45	46	53	53	60	60	35	39	52	60	58	52	47	50	
Ozark Plateau.																																
Birchtree	Maximum...	66	69	65	54	61	....	57	66	68	68	70	71	73	72	78	79	82	82	84	79	73	63	67	64	85	75	....	70	74	79	
	Minimum ...	37	46	47	41	35	....	37	38	42	42	50	44	44	43	44	46	50	56	61	59	60	46	37	56	62	57	....	54	48	60	
Cassville	Maximum...	58	68	73	56	56	56	44	64	63	65	68	70	71	69	73	77	81	83	80	78	65	68	64	74	70	73	74	74	77	78	
	Minimum ...	41	40	42	41	33	36	56	31	35	36	52	39	38	37	37	39	45	59	58	55	47	40	35	50	58	63	55	53	41	61	
Eldon	Maximum...	60	61	51	50	57	57	55	67	70	69	69	71	70	71	78	80	84	89	88	79	74	64	64	73	69	82	69	70	79	72	
	Minimum ...	36	39	47	38	30	35	39	39	47	46	53	39	41	44	40	48	56	57	63	60	57	43	39	40	54	60	50	51	56	57	
Fruit City	Maximum...	68	71	61	54	60	62	56	69	71	70	70	71	68	72	81	83	84	85	87	86	77	65	69	77	72	85	78	72	77	75	84
	Minimum ...	44	45	45	41	42	47	42	42	50	46	47	42	40	48	48	48	49	48	61	60	62	46	38	52	50	59	59	62	63	65	
Gano	Maximum...	60	71	54	50	56	55	54	64	68	68	66	67	68	70	78	81	86	89	90	79	76	60	64	75	77	84	74	69	77	72	
	Minimum ...	37	41	46	38	32	37	40	36	45	47	48	40	44	41	45	49	56	58	62	59	60	42	36	45	53	61	52	51	47	59	
Hollister	Maximum...	76	78	66	56	64	68	66	72	74	86	78	74	76	78	80	84	86	88	86	78	76	54	64	78	84	90	78	78	76	82	84
	Minimum ...	36	40	46	44	36	40	38	36	38	52	38	38	40	42	38	40	42	46	52	50	48	46	38	44	42	48	52	50	48	46	42
Ironton §§	Maximum...	66	69	58	50	59	57	55	67	70	69	69	70	70	72	79	81	84	86	87	80	79	64	67	76	69	86	76	70	77	76	82
	Minimum ...	39	36	47	45	34	33	38	37	37	42	44	36	39	36	37	41	46	55	60	53	60	60	35	39	52	59	55	52	42	56	61
Koshkonong	Maximum...	66	72	60	55	62	58	56	64	67	69	68	67	66	72	77	81	84	85	84	73	73	64	67	70	69	85	77	71	77	80	82
	Minimum ...	37	40	48	43	36	39	44	42	44	47	52	49	46	46	48	50	51	56	59	60	59	47	40	48	51	63	58	53	53	61	60
Lebanon §§	Maximum...	64	71	55	43	57	58	65	66	67	70	69	70	70	71	78	80	83	89	89	79	70	60	67	74	68	81	70	71	77	74	79
	Minimum ...	36	35	46	41	31	31	41	32	34	44	47	39	39	38	38	42	51	58	62	63	59	56	38	40	49	57	53	54	50	52	58
Mountain Grove §§	Maximum...	64	72	54	45	56	57	56	64	66	68	65	66	69	69	75	77	80	83	84	73	74	58	65	70	65	82	65	68	74	76	78
	Minimum ...	35	41	47	42	34	35	47	34	38	47	42	48	42	38	40	48	54	57	50	53	58	52	36	40	52	54	56	53	49	52	54
Neosho	Maximum...	65	77	75	58	57	56	68	65	67	70	68	71	71	70	76	79	83	86	83	81	71	71	66	77	74	81	79	70	80	76	79
	Minimum ...	31	41	54	41	33	34	38	30	36	37	51	35	38	35	37	43	53	57	66	57	57	47	36	50	59	67	54	53	49	60	53
Rolla §§	Maximum...	62	72	53	45	61	60	51	67	70	70	67	72	67	71	82	82	87	90	89	79	77	57	60	77	70	85	74	71	78	73	79
	Minimum ...	36	39	45	45	33	35	39	39	42	40	50	43	45	45	44	45	55	60	64	62	61	55	37	40	48	57	54	52	43	51	60
Springfield	Maximum...	60	70	66	52	56	54	54	62	63	66	66	69	69	69	74	77	82	85	85	72	68	62	62	68	66	80	67	67	75	78	76
	Minimum ..	37	46	48	37	34	40	40	39	46	46	51	50	51	46	50	53	60	61	62	61	58	41	40	51	57	66	53	52	54	59	56
Southwest Plain.																																
Amoret	Maximum...	59	59	53	53	54	54	53	64	63	58	64	69	68	70	71	74	83	83	82	84	65	65	62	67	67	65	60	67	73	73	66
	Minimum ...	32	44	46	37	34	34	38	36	42	44	42	40	45	39	41	48	52	60	66	60	57	44	36	48	56	49	50	52	51	54	54
Appleton City	Maximum...	63	63	56	53	57	60	57	69	70	69	71	72	72	74	78	80	83	88	86	84	71	67	67	73	70	78	73	72	79	74	72
	Minimum ...	33	43	48	38	34	37	37	38	41	45	48	43	48	42	47	48	57	61	67	62	59	45	39	48	58	61	52	54	51	57	57
Clinton	Maximum...	64	61	57	53	62	63	61	70	63	70	73	76	75	77	80	83	83	91	90	85	70	65	69	75	68	80	74	75	80	75	73
	Minimum ...	35	43	48	39	34	37	38	37	43	38	47	41	48	43	45	46	46	58	67	62	59	45	40	46	57	62	52	50	50	59	57
Harrisonville §§	Maximum...	61	52	53	47	57	60	57	67	71	67	69	72	71	73	76	81	82	86	87	75	67	54	67	74	70	82	60	70	76	70	66
	Minimum ...	33	39	44	38	35	37	39	38	41	43	42	40	45	39	42	47	52	51	65	64	60	45	37	43	53	58	51	52	52	55	55
Lamar §§	Maximum...	64	72	63	46	60	61	60	70	67	72	71	75	76	76	79	82	85	89	89	75	73	52	68	73	73	82	75	73	80	77	70
	Minimum ...	33	45	51	41	35	37	40	35	40	41	51	41	45	42	42	48	63	60	68	61	60	51	40	51	59	68	54	55	53	60	57
Lamonte	Maximum...	61	52	50	48	52	57	58	67	69	67	67	70	69	71	76	81	82	89	86	79	65	61	66	74	65	76	63	71	76	70	64
	Minimum ...	32	40	40	38	32	32	38	33	41	44	42	38	38	38	38	50	56	61	69	61	59	41	39	45	53	63	49	52	52	57	56
Marshall	Maximum...	60	55	49	48	58	60	....	69	72	71	72	72	70	74	77	83	84	87	87	85	70	65	68	75	74	79	65	71	74	69	67
	Minimum ...	35	40	46	38	35	38	....	35	42	43	40	41	43	44	43	44	45	58	67	62	60	44	37	44	46	62	50	51	49	51	57
Warrensburg	Maximum...	63	54	52	49	57	60	58	68	70	68	69	72	70	73	80	84	86	91	90	80	68	60	68	77	71	79	63	72	78	72	66
	Minimum ...	36	42	46	39	36	37	38	41	47	45	46	45	45	45	46	54	55	62	69	61	59	44	40	48	55	59	51	53	53	56	56
Warsaw	Maximum...	63	65	56	53	59	58	56	69	74	71	70	73	71	73	78	83	85	90	89	78	70	67	68	75	70	82	74	73	80	76	72
	Minimum ...	35	45	52	40	30	32	36	30	36	45	48	36	42	35	36	39	51	54	64	62	58	45	36	42	55	63	50	55	46	60	60
Northwest Plateau.																																
Avalon	Maximum...	59	52	50	50	60	60	62	69	70	66	69	73	70	75	76	80	82	87	88	78	68	63	66	76	70	75	66	70	74	70	65
	Minimum ...	38	45	45	40	35	38	37	42	49	48	45	55	46	50	57	60	65	70	70	62	55	43	41	48	52	54	54	50	53	55	55
Grant City	Maximum...	52	51	44	45	58	61	61	68	71	71	66	70	68	72	79	80	79	80	86	76	68	62	69	75	67	69	60	72	68	70	70
	Minimum ...	34	43	35	33	34	35	36	39	44	43	42	43	44	45	43	45	43	45	46	42	41	40	40	43	40	57	52	47	50	53	56
Kansas City	Maximum...	62	48	49	47	56	60	57	68	67	63	67	72	69	73	75	79	81	86	85	75	65	58	66	73	68	71	57	70	75	68	65
	Minimum ...	38	43	41	38	37	41	40	43	49	51	45	51	50	51	50	58	64	66	70	61	56	44	43	54	57	57	53	53	58	58	56
Kidder §§	Maximum...	57	51	45	49	59	58	60	66	69	65	68	69	68	72	75	80	82	85	88	78	68	55	66	74	66	69	59	69	72	75	67
	Minimum ...	34	42	44	37	34	37	36	41	47	50	43	45	44	45	54	52	60	62	69	62	55	42	41	49	54	64	54	49	54	[illegible]	55
Lexington §§	Maximum...	60	50	48	48	60	60	61	70	72	71	71	75	71	74	77	84	83	89	90	78	70	54	70	75	68	76	60	72	75	70	68
	Minimum ...	36	42	45	39	35	35	36	39	46	48	46	44	42	44	44	53	63	59	70	60	63	47	41	50	55	63	53	52	54	63	56
Maryville §§	Maximum...	54	50	44	44	60	63	64	70	71	70	68	73	74	77	80	83	89	88	80	79	64	59	70	77	69	67	57	74	74	71	70
	Minimum ...	32	36	40	32	33	34	32	34	41	44	39	42	41	41	42	48	54	56	62	58	52	39	38	40	40	52	51	44	44	55	54
Oregon	Maximum...	55	50	45	43	56	59	58	65	67	64	65	70	69	72	74	78	82	83	85	75	64	57	65	72	66	65	60	69	72	66	66
	Minimum ...	32	40	36	33	32	34	35	39	43	46	41	44	42	43	47	53	59	62	65	62	52	39	36	46	54	54	50	45	55	58	52
St Joseph	Maximum...	58	48	47	45	60	62	61	69	69	64	69	71	71	75	77	82	86	87	90	76	66	58	68	75	66	70	57	73	75	68	67
	Minimum ...	37	42	38	36	35	37	37	41	49	50	45	43	43	42	44	56	61	66	69	56	55	42	42	51	57	56	53	49	57	59	54
Trenton	Maximum...	55	54	49	49	56	58	59	66	70	69	66	69	67	71	74	79	81	85	87	84	71	61	68	73	70	74	70	71	73	69	70
	Minimum ...	36	44	43	36	34	38	35	41	48	49	44	45	43	43	45	50	61	60	61	62	48	41	42	48	49	58	53	50	52	60	57

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charg the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR MAY, 1917, AT THE UNIVERSITY OF MIS COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 37 and 38.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, northwest; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 BWG iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consist of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau stan
described in Circular L. Horizontal distance of the anemomete
pan, 2 inches. Height of cups of anemometer above rim of
inches. The instrument shelter is 100 feet southeast of the pan
of thermometers above ground, 11 feet. Distance of rain gage fr
2.6 feet. The ground in the immediate vicinity of the pan slope
north, average 5 per cent grade. The soil is covered by blue gr
being part of the University campus. There are no bodies of wat
nor are there any irrigation projects under way nearby. The
topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising
being George Reeder, Meteorologist and Section Director. The
tions in the table herewith, were taken by Philip G. McGinnis,
observer, Weather Bureau. This is one of the "Class A" stati
signed to furnish practical information relative to evaporation.
complete climatic records have been made at Columbia, Mo.,
Weather Bureau for about 28 years. These records are published
are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for May, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.075	.138	.011	†.007	.029	.168	.140	.087	160	185	.142	.134	.133	.201	.170	.186	.262	.235	.103	.263	.367	185	025	.156	173	.047	251	.037	.155	.117
Daily wind movement	83	56	88	57	49	51	50	32	37	37	36	30	25	39	33	19	37	43	29	49	28	34	43	39	32	47	58	55	31	37

*Total in next following measurement. † Indicates minus (−) Observations taken at 6

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	14	4.31	−0.01	0.98	0	9	17	2	12	se.	G. V. Randolph.
Boonville	40	5.84	+0.65	1.58	0	11	22	2	7	se.	C. Randecker.
Cape Girardeau	10	3.47	−0.23	1.10	0	8	20	1	10	w.	D. L. Albert.
Chillicothe	2	4.35	....	0.90	0	12	20	1	10	.....	Hocey O. Dupy.
Glencoe	0	1.41	....	0.60	0	11	15	6	10	s.	Vint R. Neel.
Hermann	43	4.15	−0.15	1.20	0	15	12	3	11	w.	C. T. Maushund.
New Madrid	23	3.91	−0.41	1.10	0	9	17	3	11	se.	Miss Josie Smith.
Osceola	......	5.96	+0.04	1.48	0	11	18	5	8	......	W. E. Matthews.
Pacific	0	3.45	....	1.20	0	14	18	4	9	......	R. C. Dougherty.
Steelville	15	....	....	....	....	..	..	.	..	......	Thos. D. Slater.
Tuscumbia.	0	4.90	....	1.25	0	9	19	1	11	ne.	C. B. Wright.
Union	0	4.19	....	0.70	0	14	4	6	11	sw.	J. Wm. Keller.
Valley Park	0	4.72	....	1.46	0	14	20	2	9	w.	H. J. Lucksinger.
Waverly	2	5.48	....	1.03	0	10	21	2	8	sw.	J. W. Cauthorn.

Destructive Storms, May, 1917.

More severe storms of a tornadic character struck southern Missouri in the last ten days of the month than have occurred for years in the same length of time. That the loss of life and damage to property was not greater, although both were heavy, must be attributed to the sparsely settled and poorly developed condition of much of the territory affected. The greatest loss occurred in the scattered small towns.

On the 21st three small tornadoes struck in the southwest Ozarks. One began its course of destruction three miles northwest of Arno in northwest Douglass County, about 2 p.m. It passed northeast, near Granada, to Mansfield, in Wright County, at 2.35 p. m. Two persons were injured and bearing orchards were heavily damaged, one orchard of 1000 trees being completely destroyed. A second storm struck in Coldwater and vicinity, in eastern Douglass County, injuring four persons, and causing $5000 damage. A third struck near Niangua, in northern Webster County, at 2.23 p.m., inflicting relatively a small property damage.

On the 25th and 26th, a belt of country, beginning with Clay County on the west and extending nearly due east across the state to Pike County, suffered more or less severe damage from hailstorms and excessive rainfall Creeks were out of banks, and crops were badly washed out on hillsides. At Clifton Hill, hail "as large as walnuts" damaged flat roofs and glass; and at Louisiana, hailstones nine and one-half inches in circumference were reported. These storms were incipiently tornadic, and doubtless developed into the severe tornado that swept central Illinois from the Mississippi River opposite Louisiana in Pike County, eastward to Mattoon and Charleston, Ill.

On the 27th two tornadoes again struck the southwest Ozark Plateau. One began to the southwest of Hurley, in Christian County, passing through or near Ozark. Another struck Bruner, in the same county, thirteen miles to the west of Ozark, and passed northeast to the vicinity of Fordland, in Webster County. One man was killed in Fordland by flying debris, and four others injured. On the same day, at about the same time, between noon and one o'clock, a third storm struck five miles south of St. Marys, in Ste. Genevieve County, and passed across the Mississippi River into Illinois. Fifteen persons were injured in a track of less than ten miles in this State.

The storms on the 30th struck in the eastern Ozarks and the southeast lowlands, with the exception of a small storm in the vicinity of Rich Hill, in south
County. Two tornadoes, apparently originating near together in northwes
as County, west of the Piney River, traveled to the northeast in nearly para
about twelve miles apart. The northern storm, after killing four persons
River, passed through the vicinity of Hazelton, Dent, Sherrill, Lenox, an
killing six persons, and doing damage estimated at $30,000 to homes and cro
southern path has been traced from west of Success, in Texas County, t
the north of Licking and through Maples; Salem in Dent County; Dillard
ford; Palmer, Eye, and Mineral Point in Washington County, to Melso a
Mines in Jefferson County. The storm passed Licking at about 1.30 p. m.
Salem about 2.00 p. m., Mineral Point at 3.28 p. m., and Valles Mines soon
p. m. Ten persons were killed, four of whom met death when Mineral Poi
of nearly 300 inhabitants, was wrecked with the exception of the schoolhou
property damage in Washington County has been estimated at over $500,00
Jefferson County at $100,000. Another storm took toll of northern Iron
tral St. Francois counties, affecting the vicinities of Graniteville, Bismarck
River.

In the southeastern lowlands, more than 25 persons were killed and ov
jured in a series of storms that moved across Stoddard, Bollinger, and Scott
With many points along the path yet untraced, it seems certain that the
least two storms, generally paralleling each other in a northeasterly directi
southern storm apparently struck first to the southwest of Acorn Ridge, in we
dard County, passing near Zeta and Ardeola to Oran, in Scott County.
struck first in northern Butler County, about 35 miles west of the origin o
mentioned storm, and passed through Chaonia, in southern Wayne Co
Zalma, Dongola, and Drum in southern Bollinger County. All means of co
tion with some of these rural towns was destroyed, the roads being impass
fallen timbers, and the deluge of rain that accompanied the tornado.

As a conservative estimate, the damage and loss to property in the Sta
storms of May exceeds $1,000,000; and the loss of life, well authenticated, is 4
Hundreds were rendered homeless; but relief measures have generally bee
and sufficient.

O.

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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JUNE, 1917

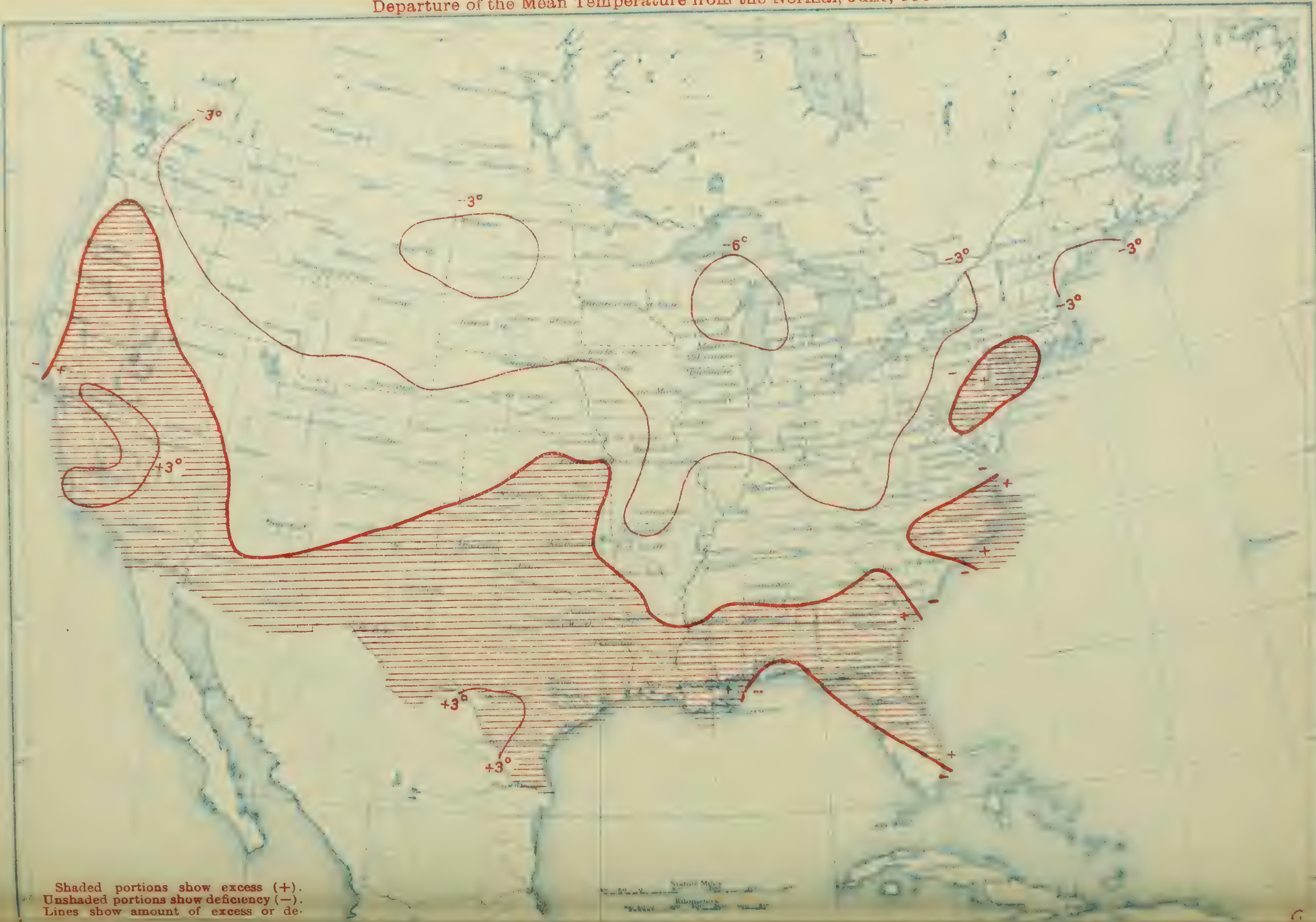
BY

GEORGE REEDER
METEOROLOGIST

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JULY 21, 1917.

Departure of the Mean Temperature from the Normal, June, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXI. Columbia, Mo., June, 1917. No. 6.

GENERAL SUMMARY.

vere local storms on the 5th, and 13th; and damaging river s during the first two weeks, the result of excessive rains the northern half of the State, were the marked features of weather of the month. In other respects the month was, rule, favorable for outdoor occupations and crop growth, markedly pleasant from the physiological side.

e month was cooler than normal, but closed with high eratures. The first ten days were excessively wet over the hern half of the State, and the southeastern lowlands re d some heavy rains, but the remainder of the State, and cially that part lying between the Missouri River and the of the Ozark Plateau, was drier than usual.

the close of the month the harvesting of wheat and oats, r ideal weather, was well under way north to the Missouri r. Wheat, though thin, was of excellent quality. Oats ably were never better. The corn crop was in excellent ition: it was growing fast, and the fields were clean and cultivated. The overflowed lands had been replanted and on was coming up to good stands. The first crops of al- and clover, of excellent quality, as well as quantity, had cut. Timothy on the other hand was not ripe, but prom- well, save in a few localities.

tatoes and gardens, a larger acreage than usual having been ed, promised well, although in most sections they needed Pastures also were in need of rain; but cattle generally in fine condition.

TEMPERATURE.

e monthly mean temperature for the State, as shown by ecords of 69 stations, was 71.0°. The mean departure from ormal for 63 stations having 10 or more years' record was s 2.3°. The deficiency was quite uniformly distributed, ugh somewhat less marked in the northwestern plateau in the other divisions. The 30th was the only real warm f the month. On that date 52 stations experienced tem- ures of 95° or higher, and 13, all in the western half of the , had 100° or higher, the maximum being 103°, at Harri- le. The cooler periods were from the 1st to the 3rd; 6th 10th; and 13th to the 21st. The minimum was 35°, at n on the 16th. The extremes of the present month, how- were well within the limits of other years. For compar- ata of the present month with other years see table in the right-hand corner of this page.

PRECIPITATION.

e average for the State, 85 stations reporting, was 3.78 s. The mean departure from normal for 73 stations hav- 0 or more years' record was minus 0.59 inch. The pre- ation was unevenly distribution over the State and during onth. It was excessive in the northern tier of counties, n other divisions, except a few stations in the southeastern nds, the month was much drier than usual. The defic- in moisture was marked in most of the central counties Vernon to Cass and east across the State to Jefferson and ouis. The greatest monthly precipitation was 13.54 inches, aryville. Six stations received amounts exceeding 10 inches, the northern tier of counties; twenty four had amounts cess of the normal; twenty eight stations received less than hes, and thirteen less than 1 inch. The least monthly as 0.09 inch, at Crocker. At Warsaw, Benton County, it the driest June in twenty years. The greatest amount in twenty-four consecutive hours was 4.19 inches, at Gallatin e 27th. At Unionville, 2.60 inches fell on the 15th, and oshkonong, 3.40 inches on the 9th.

e average number of days with 0.01 inch or more precipita- was 8.

e northern tributaries of the Missouri River were out of s during the first week; and the Missouri River, and the Mississipi from St. Louis northward, and their tributaries in the northern half of Missouri, flooded all lowlands from about the 10th to the 15th, resulting in immense damage and loss to some of the finest wheat and corn fields, as well as hay, truck, and much other property.

EVAPORATION.

The total evaporation for the month, at Columbia, Mo., was 6.26 inches; the total rainfall, 2.66 inches; the wind movement over the surface of the pan, 920 miles, and the mean temperature, 71°. During the same month in 1916, these data were, in order named, 5.16 inches; 3.65 inches; 1,057 miles, and 69°. The table for the present month is published on page 48.

WIND.

The prevailing direction of wind was from the south. The average monthly wind movement for the State, 8 stations reporting, was 7,134 miles, or an average hourly velocity of 9.9 miles, nearly normal. High winds prevailed on the 1st, 5th and 6th; and several severe local storms occurred on the 5th and 13th. See page 48.

SUNSHINE AND CLOUDINESS.

The first week was more or less cloudy, but the remainder of the month was sunshiny. The average number of hours of sunshine for the State was 359, or about 70 per cent of the possible and 11 per cent above normal.

MISCELLANEOUS PHENOMENA.

Earthquakes—Slight shock at Sikeston on the 9th; and at Poplar Bluff on the 21st.
Hail—1st, 5th, 8th and 12th.
Halos, Solar—1st, 3rd, 13th, 16th, 20th, 22d, 26th and 29th.
Thunderstorms, more or less general—1st, 4th, 5th, 8th, 12th, 13th, 23rd, 27th and 28th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
								Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.97	85	......	373	84	5,469	7.6	34	sw.	26
Hannibal	29.97	79	......	......	......	7,021	9.8	39	sw.	6
Kansas City	29.94	74	48	355	80	8,978	12.5	38	n.	13
St. Joseph	29.94	78	54	380	85	6,455	9.0	44	nw.	5
St. Louis	29.98	72	56	311	82	9,825	13.6	43	sw.	6
Springfield	30.01	76	60	340	77	7,495	10.4	60	se.	1
Cairo, Ill	30.01	79	61	......	......	5,677	7.9	39	sw.	1
Keokuk, Iowa	29.96	79	67	347	77	6,155	8.5	38	sw.	6

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	72.6	−0.5	103	37	6.20	+1.26	......	0.0	7	....	....	....
1889	70.7	−2.4	100	38	4.66	−0.28	......	0.0	6	....	....	....
1890	77.2	+4.1	105	50	2.59	−2.35	......	0.0	6	....	....	....
1891	73.3	+0.2	103	46	6.94	+2.00	......	0.0	13	....	....	....
1892	74.5	+1.4	100	38	3.18	−1.76	4.25	0.0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	0.0	9	12	12	6
1894	74.5	+1.4	105	30	3.92	−1.02	3.48	0.0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0.0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0.0	9	12	11	7
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	0.0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	8.15	0.0	9	13	12	5
1899	74.3	+1.2	101	42	3.87	−1.07	4.48	0.0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0.0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	−2.81	2.99	0.0	6	18	10	2
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	0.0	12	11	10	9
1903	67.3	−4.2	95	36	3.25	1.69	4.90	0.0	9	15	9	6
1904	70.5	−2.6	93	45	6.42	+1.58	5.41	0.0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0.0	7	15	10	5
1906	72.7	−0.4	101	40	4.95	+0.01	4.07	0.0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0.0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0.0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0.0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0.0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0.0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.00	0.0	9	14	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	T.	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0.0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0.0	12	11	10	9
1916	70.0	−3.2	100	42	6.29	+1.17	6.75	0.0	10	14	9	7
1917	71.0	−2.3	103	35	3.78	−0.59	4.19	0.0	8	19	7	4

Climatological data for June, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	652	36	71.4	−1.4	99	30	51	3†	30	2.15	−3.28	0.84	0	6	21	0	9	nw.	Louis Benecke.
Clifton Hill	Randolph	731	....	69.9	−2.4	94	30	43	16	30	1.34	−4.22	0.23	0	10	18	9	3	......	L. S. Harlan.
Columbia	Boone	784	26	70.9	−3.6	96	30	46	16	29	2.66	−1.75	0.90	0	10	15	11	4	s.	U. S. Weather Burea
Fayette	Howard	725	31	70.4	−2.8	96	30	46	16	28	3.18	−1.48	1.07	0	10	....	..	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	12	70.9	−2.4	95	30	40	16	32	1.57	−3.27	0.43	0	10	25	5	0	sw.	Dr. O. M. Weigle.
Gorin	Scotland	700	27	......	......	......	......	......	......	....	10.00	+6.30	3.35	0	11	6	12	12	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	70.4	−2.9	92	30	43	16	27	3.75	+0.23	1.97	0	10	15	10	5	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	30	71.6	−2.4	96	30	44	16	31	0.99	−3.28	0.30	0	7	26	3	1	s.	Miss Emma Scott.
Keytesville	Chariton	660	3	......	......	......	......	......	......	....	1.34	....	0.47	0	9	....	....	....	......	T. T. Dewey, M. D.
Kirksville	Adair	969	24	68.2	−3.7	93	30	43	16	29	5.71	+1.32	1.39	0	11	7	22	1	s.	Mark Burrows.
Louisiana	Pike	469	38	70.1	−1.6	94	25	38	16	35	3.01	−1.00	0.74	0	12	25	2	3	w.	J. T. Farrell.
Macon	Macon	875	18	70.3	−2.1	92	30	43	16	37	3.50	−1.15	0.86	0	9	16	8	6	sw.	John A. Cook.
Mexico	Audrain	797	38	71.2	−2.4	95	30	44	15	33	1.80	−3.18	0.47	0	7	25	5	0	s.	R. M. Llewellyn.
Oakfield	Franklin	500	35	71.6	−2.4	95	25†	43	16	31	1.00	−3.57	0.43	0	7	13	13	4	s.	E. E. Steines.
Palmyra	Marion	652	4	70.4	−4.0	93	30	43	16	30	6.43	+1.80	2.57	0	8	21	4	5	sw.	W. B. Markell.
St. Catherine	Linn	850	3	68.9	....	91	30	45	15†	29	7.16	....	2.67	0	11	12	15	3	sw.	L. D. Baker.
St. Charles	St. Charles	456	38	71.9	−2.1	95	25†	45	15†	31	2.16	−2.00	1.25	0	5	14	14	2	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	73.3	−1.8	94	26	49	16	25	0.62	−3.85	0.29	0	8	11	17	2	s.	U. S. Weather Bureau
St. Louis (2)	.....do	578	4	72.8	......	95	25	49	16	27	0.69	....	0.27	0	8	16	10	4	s.	St. Louis University.
Shelbina	Shelby	779	24	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	S. G. Parsons.
Steffenville	Lewis	650	23	66.8	−6.0	95	30	38	15†	43	5.90	+1.91	2.10	0	11	15	14	1	s.	Frank Hall.
Unionville	Putnam	1,072	23	66.2	−5.8	93	30	41	15	36	10.98	+6.56	3.60	0	9	17	7	6	nw.	Geo. W. Davis.
Warrenton	Warren	865	25	72.0	−1.4	95	24	41	16	34	0.98	−3.37	0.52	0	7	15	13	2	s.	Prof. J. H. Frick.
Section means and extremes		....	....	70.5	−2.8	99	30	38	15†	43	3.50	−0.91	3.60	0	9	17	9	4	s.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	....	......	......	..	......	......	....	......	....	...	...	....	....	....	....	.....	F. E. Tate.
Caruthersville	Pemiscott	220	25	76.8	−0.4	98	24†	51	16	37	5.07	+1.40	1.64	0	8	23	4	3	e.	H. E. Averill.
Doniphan	Ripley	344	11	73.8	−0.9	95	25†	44	16	37	5.20	+0.98	1.78	0	8	21	5	4	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	72.4	−1.7	99	24	40	16	39	4.66	+0.42	2.45	0	8	16	8	6	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	70.4^{e}	−3.8	.....	......	40	16	32	5.15	+0.83	1.35	0	7	18	12	0	w.	Dr. A. F. Hendricks.
Patton (near)	Bollinger	500	1	...	....	....	......	......	......	....	4.60	....	1.70	0	7	20	0	10	s.	George F. Ellis.
Poplar Bluff	Butler	339	12	71.6	−4.3	94	26	41	16	39	4.59	−0.73	1.22	0	5	19	5	6	......	Miss Belle Kinne.
Sikeston	Scott	328	15	70.4	−3.8	96	27	48	15†	25	4.05	−0.33	1.89	0	8	21	8	1	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	74.2	−1.0	94	26	50	16	27	3.15	−1.16	1.35	0	9	9	16	5	s.	U. S. Weather Burea
Section means and extremes		....	....	72.8	−2.3	99	24	40	16	39	4.56	−0.22	2.45	0	8	18	7	5	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	70.8^{a}	−2.1	93	24	42	16	31	6.74	+2.23	1.98	0	10	23	5	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	28	67.5	−5.3	93	30	42	16	32	1.36	−3.95	0.60	0	6	24	4	2	s.	A. C. Fink.
Cassville	Barry	1,500	5	67.8	....	93	30	40	15†	40	3.49	+0.12	1.52	0	7	25	4	1	s.	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,126	5	72.2	−0.5	93	12†	53	1	29	0.09	....	0.09	0	1	26	2	0	e.	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	69.8	−3.5	95	29	40	15†	42	2.19	−3.53	0.60	0	8	22^{b}	4	2	..	H. E. Dean.
Eldon	Miller	934	15	70.2	−3.4	99	30	39	1	37	1.64	−2.94	0.98	0	8	14	12	4	sw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	73.2	....	98	26†	44	16	37	4.10	−0.74	1.30	0	6	23	2	5	s.	R. C. Walton.
Gano	Dent	1,250	12	70.8	−2.3	97	27	38	16	34	2.05	−2.54	1.34	0	8	22	6	2	s.	A. C. Leach.
Goodland	Iron	1,000	11	69.2	−3.2	97	27	41	16	36	2.58	−1.71	1.22	0	8	17	12	1	s.	F. M. Adams.
Hollister	Taney	735	7	73.2	−2.6	100	30	50	16	36	3.85	−0.30	1.70	0	5	23	0	7	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	70.7	−1.5	92	26	42	16	30	3.18	−1.83	1.22	0	7	22	6	2	se.	R. F. Harmon.
Ironton	Iron	925	38	70.6	−1.5	95	26	35	16	38	2.65	−2.17	0.80	0	9	8	22	0	sw.	W. H. Delano.
Koshkonong	Oregon	958	15	72.6^{a}	−1.7	94	23†	44	16	30	6.94	+2.81	3.40	0	7	15^{a}	12^{a}	2^{a}	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	70.6	−2.8	97	30	42	15	37	1.70	−3.42	0.42	0	7	26	2	2	s	Leonard E. Dickerso
Lockwood	Dade	1,078	21	71.6	−2.7	96	30	46	16	29	2.66	−2.07	0.86	0	6	22	4	4	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	69.6	−2.1	93	27	40	15	32	4.13	−0.14	1.08	0	9	17	12	1	s	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	C. L. White.
Neosho	Newton	1,011	33	71.2	−2.7	95	30	40	15	35	5.55	+0.12	2.63	0	8	22	8	0	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	71.8	−0.9	98	26	40	16†	37	1.42	−2.87	0.52	0	6	20	8	2	sw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	70.9	−1.4	94	30	48	15	26	2.69	−2.50	1.04	0	5	23	5	2	s.	U. S. Weather Bureau
Section means and extremes		....	....	70.8	−2.4	100	30	35	16	42	3.11	−1.42	3.40	0	7	21	7	2	s.	
Southwest Plain.																				
Amoret	Bates	831	7	70.2	−3.1	99	30	44	15	32	0.51	−3.85	0.31	0	3	17	11	2	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	72.7	−2.0	100	30	45	15	33	0.66	−4.68	0.31	0	5	18	11	1	sw.	W. G. Bigelow.
Clinton	Henry	765	29	72.9	−0.2	101	30	45	14†	40	1.66	−3.22	0.60	0	6	21	7	2	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	71.2	−2.2	103	30	45	15	35	0.67	−3.94	0.22	0	6	14	3	13	sw.	A. J. Sharp.
Lamar	Barton	980	35	72.8	−1.6	100	30	45	15	31	2.28	−2.60	0.98	0	7	21	7	2	s.	Joe W. Springer
Lamonte	Pettis	863	27	70.2	−4.5	100	30	44	16	38	1.53	−3.19	0.52	0	5	20	9	1	sw.	J. Ed. Hall.
Marshall	Saline	779	25	70.9	−2.0	99	30	42	16	36	1.46	−3.00	0.70	0	5	18	9	3	sw.	Dr. W. H. Black.
Nevada	Vernon	860	22	72.4	−1.0	97	30	44	15	33	1.02	−4.26	0.46	0	5	24	5	1	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	......	....	.....	......	......	......	....	......	....	......	......	....	....	....	....	......	Geo. H. Collins.
Warsaw	Benton	687	11	71.2	−2.5	102	30	38	15	39	0.78	−4.65	0.52	0	4	16	14	0	sw.	J. R. Smith, M. D.
Section means and extremes		....	....	71.6	−2.1	103	30	38	15	40	1.17	−3.71	0.98	0	5	19	8	3	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	73.6	+0.5	96	30	52	16	33	2.25	−2.13	1.45	0	4	22	4	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	69.8	−2.1	97	30	50	15	32	12.08	+7.94	2.55	0	13	10	15	5	sw.	M. H. Moulton.
Chillicothe	Livingston	....	....	69.8	....	95	24	46	15†	32	7.70	....	2.70	0	8	22	0	8	sw.	Dr. J. R. Campbell.
Conception	Nodaway	982	31	70.0	−1.1	98	30	50	16	32	12.22	+7.76	2.56	0	10	20	7	3	sw.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	16	......	....	......	.....	......	......	....	9.00	+3.97	4.19	0	13	18	8	4	nw.	Robert R. Wynne, Jr.
Grant City	Worth	1,134	23	69.2	−1.7	97	30	46	15	37	12.62	+8.28	3.04	0	8	22	2	6	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	72.7	−0.3	102	30	52	16	30	3.31	−1.32	1.86	0	7	20	9	1	s.	U. S. Weather Bureau
Kidder	Caldwell	1,020	25	70.1	−2.0	100	30	45	15	32	3.52	−0.86	1.37	0	9	20	7	3	sw.	J. F. Sharp.
Lexington	Lafayette	688	34	71.9	−0.8	100	30	46	15	30	2.91	−2.00	1.28	0	6	23	1	6	s.	J. W. Keithley.
Liberty	Clay	864	27	73.1^{a}	−0.6	102	30	45	16	34	4.58	−0.21	1.51	0	7	23	3	4	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	68.2	−0.7	99	30	42	15†	41	13.54	+8.99	2.48	0	12	19	1	10	s.	J. R. Brink.
Oregon	Holt	1,048	60	68.8	−3.5	96	30	45	15	29	9.07	+4.33	3.95	0	7	20	7	3	s.	Tom Curry.
St. Joseph	Buchanan	967	44	72.0	....	101	30	49	15	29	6.21	+1.49	2.66	0	8	17	9	4	s.	U. S. Weather Bureau
Tarkio	Atchison	976	4	70.4	−2.4	102	30	43	15	32	7.47	+2.51	1.96	0	9	23	2	5	sw.	John F. Frazier.
Trenton	Grundy	822	21	70.0	−2.4	94	30	46	15	31	8.39	+4.46	2.64	0	11	14	10	6	s.	W. H. Estes.
Section means and extremes		....	....	70.7	−1.4	102	30	40	15	41	7.66	+3.09	4.19	0	9	19	6	5	s.	
State means and extremes		....	....	71.0	−2.3	103	30	35	16	43	3.78	−0.59	4.19	0	8	19	7	4	s.	

The departures from normal temperature and precipitation are computed only for suchstations as have ten or more years of record, but all complete report used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b}represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5.

Daily precipitation for June, 1917.

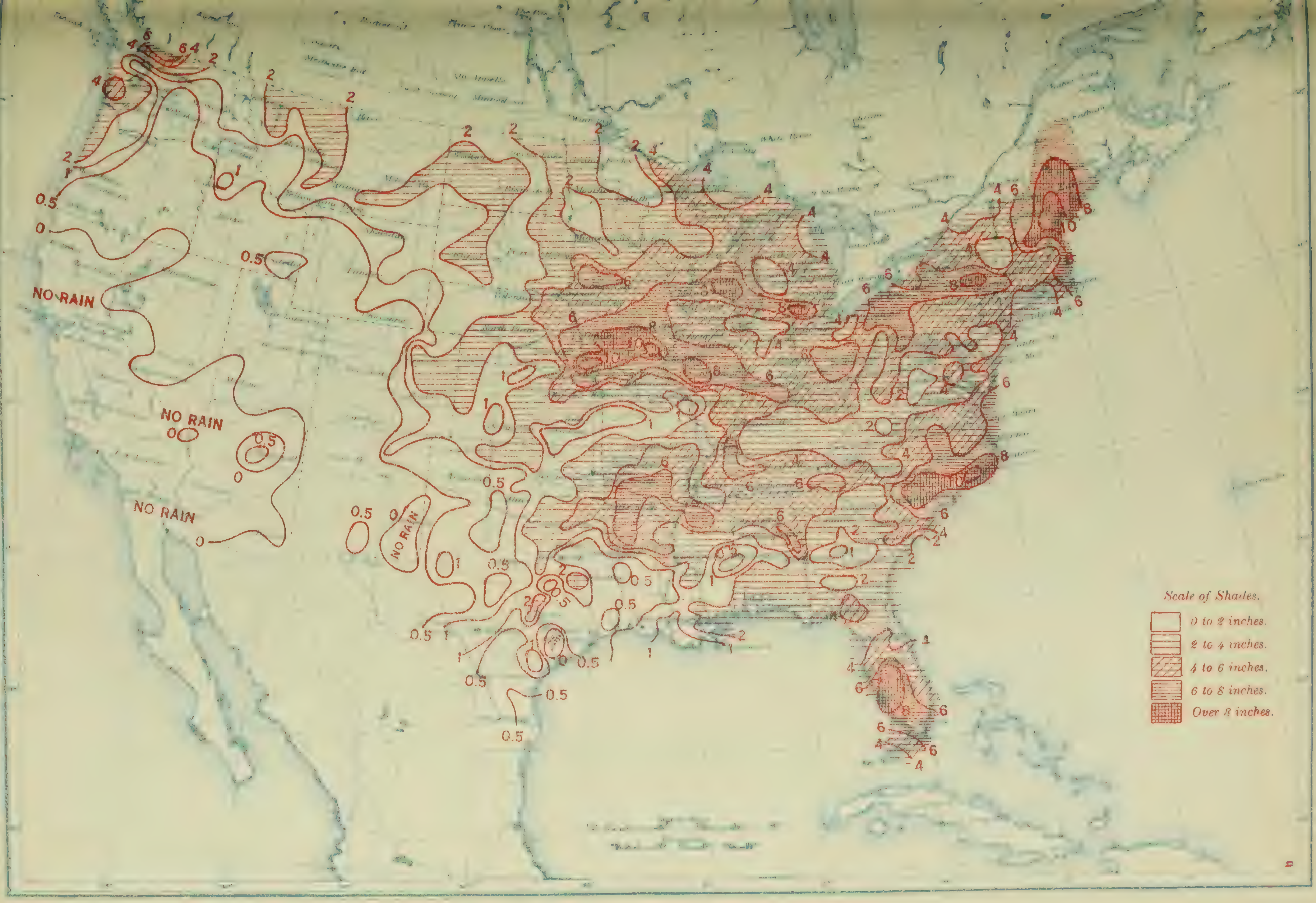
Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
ville ‖	Missouri	T.	.13			.04	.28			.19	T.			.43										.98	.08			.69	.11				2.93
nswick ‖	Grand		.84				.46			.15				.10														.48	.12				2.15
n Hill	Chariton	.19	.10		.02	.15	.03			.18				.15										.19				.23	.10				1.34
umbia***	Missouri	.35			.09	.18		T.	.28	.07			.17	.20			T.							.90	T.		.40	T.	.02				2.66
tte	......do	.30			.09	.98			.04	.08			.03	.17			.01							.79			.69	T.					3.18
ton	......do	.11	.01		.11	.18	.10			.43			.30	.04										.20				.09					1.57
ecoe ‖	Meramec	.03					.02			.02																				.20	.07		0.34
n	Mississippi		.55		3 35	1.53	.65		.51				.42	1.63										.23				.46	.63		.04		10.00
nibal***	......do	.21	.01		1.72	.44			.66				T.	.24			T.							.05			.03	.36	.03		T.		3.75
rmann	Missouri	.02	.02			.08	.05		T.	1.36	.15			.05	.02										.01			.44		.07			2.27
rson City ‖	......do	.10	.05			.3.	.02			.25				.12											.15								0.99
tesville	Chariton		.15	.05	T.	.40	.02			.12			T.	.05			.01											.47	.07				1.34
ksville	Mississippi	.03	.61		1.39	.71	.32	.17	.20					1.31			T.							.12				.35	.50				5.71
siana	......do		.44		.12	.22	.14			.44			.74	.08									T	.04	.03			.70	.01		.05		3.01
on	Chariton		.11			.74	.19			.56			.07	.38				T.						.06				.86	.53	T.			3.50
co	Mississippi		.47			T.	.24			.30			.20	.12										T.				.41	.06				1.80
eld	Meramec	.03				.10	.03			.26	.12		T.	.03										T.					.43		T.		1.00
ice	......do	.04	.02			.11	.02			.20	.11			.01																.01	T.		0.52
vra ‖	Mississippi		.43			2.57	.53			.62														.40	.04			1.14	.70				6.43
atherine	Grand	.12	.58		2.45	.22	.13	T.	.26	.10				.54			T.							.12				1.95	.69				7.16
harles.	Missouri						.26			.20				T.										T				.35	.10		1.25		2.16
ouis (1)***	Mississippi	.06				.29		T.	.01	.09				.01					T.	.03	T.							.09	T.		.04		0.62
uis (2)	......do	.09				.27		T.	.01	.03				.01						.02								.18	T.		.08		0.69
ma	......do																																
ville	...... do	T.	.35		2.10	.30	13	.10	T.	.15			.40	.52			T.							.15				.57	1.13				5.80
	Meramec	.01	.07			.28	.03			.30	.21				.02															.01			0.93
nville ‖	Grand		1.50			3.60	1.20			.20			1.40	1.90										.08			T.	.60	.50				10.98
y Park ‖	Meramec	.04	.04			.10	.07		T.	.08	T.			T.	T.					.01								.05		.15	.03		0.57
renton	Mississippi		T.			.10	.10			.52	.03			.01	T.									.01	T.		.21		T.				0.98
theast Lowlands.																																	
Girardeau ‖ ‖	Mississippi	.40	1.10				.02			.80	.20											.02								.40			2.94
tersville	......do	.62	1.64				.60	.03	.60	.95				T.						T.	T.	.26					T.		T.	.37			5.07
pan	Black	.53	.97						.32	1.78											.29	.81					.40	T.		.10			5.20
son	Mississippi	2.45				.24			.75	.40				.01						.06									.70		.05		4.66
de Hill	......do	1.00	1.10							1.10										1.35		.10						.25		.25			5.15
Madrid ‖	......do	.50	1.05				.38	.02	.15	.82	.70				.01							1.45	.01							.40			5.49
on (near)	......do	1.00	.90						1.70	.10																			.70	.10	.10		4.60
ar Bluff ‖	Black	1.01	1.22						.35	1.11	T.										T.	.90							T.	T.			4.59
ston	Mississippi	1.13	.70				.04		.08	1.89				.01								.15								.05			4.05
o, Ill.***	......do	1.27	.08				T.		1.12	.23				.03						T.	.01	.13					.01	T.	.27				3.15
k Plateau.																																	
gton ‖	Gasconade	.15	.32			.12			.21	1.45									.18							.05							2.48
kwell ‖	Meramec																																
tree	Black	.79	.75			.33	.48		.79	.73											.33	.06			1.98					.50			6.74
var	Osage	.20						.60	.21												.26								.05	.04			1.36
ville	White	.64				.27	.60		1.52	.18				T.							.13	T.		.15									3.49
ker		.09																							T.								0.09
	Neosho	.48			.01		.38	.45	.14	.03											.10								T.	.60			2.19
	Osage	.04			.04	.34	.02			.98					.05						T.			.16		.01							1.64
t City	Black	1.30	1.05				.26		.34	.80																			.35				4.10
	Meramec	1.12	.22			.10	.05		.10	.20											T.	12			.14						T.		2.05
lland	Black	1.22	.28			.11	.12		.12	43															.12						.18		2.58
ster	White	.75						1.00	.20												.20			1.70									3.85
ston	Gasconade	1.22				.27	.26		.42	.33											.27			T.	.41								3 18
ton ‖	Mississippi	.80	.67			T.	.12		.05	.55	15				T.					T.		05				T.				.23	.03		2.65
konong	Black	1.18	1.00				.33		.42	3.40										T.		.53		.08									6.94
ton ‖	Osage	.32	.22			.20	.05		.42	.30												.19											1.70
wood	......do	.25	T.			.10	.44		.86												.62			.39									2.66
ntain Grove ‖	White	.48	.96			.34	.27		.46	1.08												.32			.06					.16			4.13
Vernon	Neosho																																
sho	...... do	.44				.92	.29		.58	2.63											.14			.27					T.	.28			5.55
a	Meramec	.18	.25			.14	T.			.52												.15				.18							1.42
gfield***	White	.68	T		T.	.67		.39	.67					T.						T.	.28			T.					T.				2.69
ville	Meramec	.20	.15			.10	.01			.25	T.									T.		.07				.33				T.			1.11
umbia ‖	Osage	.09				.16	.22			1.18					.03							.01				.20							1.89
thwest Plain.																																	
et	Osage	.10				T.	T.		.10				T.	T.															.31				0.51
ton City	......do	.15				T.	.02		.05															.31					.13				0.66
ton	......do	.22				.52			.12															.10	.60				.10				1.66
sonville ‖	......do	.22	.16			.03	.15																			.07			.04				0.67
ar	Neosho	.21	.13			T.	.34		.98	.30												.26			.06								2.28
nte	Missouri	.28				.15	.33		.25				T.	T.											.52								1.53
hall	......do	.33	T.			.22			.09				T.	.12			T.							T.				.70					1.46
ada	Osage	.12				.46			.23				.11																.10				1.02
ensburg	Missouri																																
saw	Osage					.04	.52	T.	.17						T.						T.			.05	T.	T.			T.				0.78
erly ‖	Missouri	.03	.40			T.	.78			.25				.03				.02							T.			.37	.19				2.07
west Plateau.																																	
on	Grand	.55												.25													.85	.60					2.25
ay	......do	.62	1.15		1.96	1.38	1.66	.10	T.	.16		.02		.95			.03		T.		T.		T.				1.00	2.55	.50				12.08
othe ‖	......do		1.00			.90	2.10			.20	.20			.40														2.70	.20				7.70
eption	Missouri	.62	1.96		1.74	2.56	.50		T.					1.32			.03				T.		.03				1.95	1.51					12.22
am	Grand	.22	.92		1 21	.91	1.08		.01	.02		T.		.16			.01				T.		T.	.01			.10	4.19	.16				9.00
t City	......do	1.63	1.14		2.13	.06	2.38		T.				T.	.34			T.		T.					T.			1.90	3.04					12.62
as City***	Missouri	1.86				1.06						01		.01											.05			.18	.17				3.34
ier	Grand	.08	.72			.16	1.37					.02		.16										.03				.86	.12				3.52
gton ‖	Missouri		1.08				1.28			.38				.08														.03	.06				2.91
ty	......do	.30	1.51			.46	1.11										T.								.50			.47		.23			4.59
ville	......do	.30	1.84		T	2.48	2.34	.19		.53				1.58			02	.04				T.					1.56	2.00	.66				13.54
on	......do	2.15			.24	3.95	T.		T.					T.			T.										.72	.38	1.63				9.07
seph***	Missouri	2.66	T.		.40	1.90			T.				.03	.02			T.							T.			.52	.66	.02				6.21
o	......do	.85	.42		.20	.72	.91		.01					.53													1.96	1.87					7.47
ton	Grand	1.08	T.		1.83	1.44	.26		.36	T.		.03	.29				T.				T.			.08			2.64	.27			.11		8.39

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
egular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded.

Daily temperatures for June, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	[illegible]	[illegible]	[illegible]	81	80	[illegible]	77	81	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	73	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	70	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	54	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	74	[illegible]	76	[illegible]	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	[illegible]	[illegible]	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	[illegible]	[illegible]	73	70	71	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	73	70	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	[illegible]	65	76	[illegible]	[illegible]	71	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	52	[illegible]	[illegible]	[illegible]	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	73	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakwood	Maximum	72	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	[illegible]	[illegible]	56	63	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	65	[illegible]	73	[illegible]	[illegible]	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	53	52	[illegible]	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	74	64	73	80	[illegible]	73	[illegible]	[illegible]	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	61	[illegible]	[illegible]	[illegible]	66	62	[illegible]	62	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum	[illegible]	64	74	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	46	[illegible]	48	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	74	68	[illegible]	83	[illegible]	77	81	84	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	[illegible]	54	56	[illegible]	62	57	[illegible]	[illegible]	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																															
Caruthersville	Maximum	87	83	78	90	85	83	90	[illegible]	78	88	96	97	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	63	63	65	64	[illegible]	[illegible]	65	62	61	68	61	69	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	79	77	76	86	84	[illegible]	86	[illegible]	78	81	86	90	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	64	62	57	60	68	74	[illegible]	61	60	[illegible]	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jackson	Maximum	83	78	74	[illegible]	84	83	[illegible]	[illegible]	79	[illegible]	[illegible]	90	91	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	62	50	56	[illegible]	70	53	[illegible]	60	56	59	67	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	82	75	[illegible]	80	85	54	85	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	56	[illegible]	[illegible]	72	53	63	[illegible]	[illegible]	55	[illegible]	72	[illegible]	[illegible]	45	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Poplar Bluff §§	Maximum	74	74	77	86	84	83	[illegible]	79	77	[illegible]	86	90	92	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	62	61	56	57	62	72	54	56	59	55	58	53	65	[illegible]	46	44	43	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ozark Plateau.																															
Birchtree	Maximum	76	69	75	82	80	75	....	83	79	82	82	86	[illegible]	75	70	72	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	92	[illegible]	[illegible]	[illegible]
	Minimum	62	59	72	59	67	64	....	[illegible]	58	56	61	62	[illegible]	48	40	42	45	52	62	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cassville	Maximum	72	67	76	77	[illegible]	76	81	86	[illegible]	81	85	88	78	76	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	54	45	48	56	[illegible]	49	55	56	[illegible]	[illegible]	60	76	44	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Eldon	Maximum	55	[illegible]	78	[illegible]	[illegible]	75	73	75	[illegible]	82	[illegible]	[illegible]	82	[illegible]	70	[illegible]	82	[illegible]	[illegible]	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	48	50	60	[illegible]	55	[illegible]	57	63	60	63	69	[illegible]	53	42	40	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fruit City	Maximum	73	72	77	84	79	81	84	82	[illegible]	[illegible]	[illegible]	90	87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	62	54	60	65	67	[illegible]	56	60	57	58	70	[illegible]	[illegible]	[illegible]	[illegible]	52	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gano	Maximum	72	68	77	[illegible]	82	77	[illegible]	81	72	[illegible]	[illegible]	91	82	[illegible]	66	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	56	56	48	[illegible]	65	49	[illegible]	[illegible]	66	[illegible]	59	68	[illegible]	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hollister	Maximum	70	74	78	84	82	84	81	82	90	84	88	92	81	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	58	54	50	54	56	58	[illegible]	[illegible]	60	64	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ironton §§	Maximum	73	74	76	84	83	[illegible]	85	84	74	84	[illegible]	88	88	75	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	[illegible]	48	54	64	60	[illegible]	59	53	54	[illegible]	65	66	46	44	[illegible]	45	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Koshkonong	Maximum	78	72	76	77	83	81	85	81	85	[illegible]	[illegible]	90	....	[illegible]	74	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	53	59	53	59	[illegible]	53	62	[illegible]	59	58	62	[illegible]	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lebanon §§	Maximum	72	[illegible]	77	84	82	[illegible]	84	84	[illegible]	[illegible]	86	91	76	71	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	[illegible]	49	61	[illegible]	57	57	57	[illegible]	59	55	65	68	[illegible]	42	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mountain Grove §§	Maximum	[illegible]	68	74	83	80	76	82	80	76	84	82	88	84	72	68	71	77	82	82	[illegible]	[illegible]	[illegible]	[illegible]	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	56	56	46	54	64	59	56	[illegible]	54	52	60	66	67	48	40	44	[illegible]	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Neosho	Maximum	78	77	80	[illegible]	83	[illegible]	85	83	79	87	87	91	88	75	73	76	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	54	[illegible]	64	[illegible]	54	[illegible]	[illegible]	54	54	66	68	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rolla §§	Maximum	74	69	78	84	82	78	83	87	79	86	86	92	79	71	71	77	84	88	[illegible]	[illegible]	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	58	58	49	59	[illegible]	60	57	57	57	56	59	62	[illegible]	52	44	[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Springfield	Maximum	71	[illegible]	74	[illegible]	80	73	82	80	73	84	85	89	77	71	67	71	79	[illegible]	[illegible]	75	81	87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	[illegible]	51	62	62	58	59	59	57	59	65	71	56	54	48	48	51	58	67	61	59	64	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	69	71
Southwest Plain.																															
Amoret	Maximum	[illegible]	72	70	79	79	78	75	75	78	77	85	89	88	71	72	71	79	73	79	79	84	88	90	89	91	92	93	92	93	[illegible]
	Minimum	56	54	51	61	64	52	51	53	56	52	67	67	57	50	44	52	55	45	[illegible]	60	[illegible]	63	73	67	63	[illegible]	[illegible]	[illegible]	64	[illegible]
Appleton City	Maximum	77	71	77	85	84	79	82	81	81	85	90	93	88	75	72	76	84	89	84	[illegible]	88	92	90	[illegible]	91	94	[illegible]	[illegible]	93	[illegible]
	Minimum	57	56	52	62	66	54	[illegible]	56	57	58	68	69	[illegible]	52	45	47	54	56	64	76	56	64	70	67	[illegible]	[illegible]	69	64	65	72
Clinton	Maximum	77	[illegible]	80	88	86	80	83	85	84	87	92	94	[illegible]	76	75	77	87	[illegible]	87	82	95	94	[illegible]	97	[illegible]	92	97	94	[illegible]	[illegible]
	Minimum	60	56	50	62	63	65	55	55	57	[illegible]	67	69	57	45	45	45	[illegible]	[illegible]	52	57	[illegible]	60	69	[illegible]	61	[illegible]	61	[illegible]	61	[illegible]
Harrisonville §§	Maximum	[illegible]	69	76	85	83	73	84	81	77	84	91	94	73	77	70	76	85	[illegible]	84	80	86	94	93	[illegible]	93	86	95	[illegible]	[illegible]	[illegible]
	Minimum	55	55	52	[illegible]	63	53	52	56	55	58	65	71	57	49	45	[illegible]	[illegible]	58	59	52	54	58	68	69	65	69	65	[illegible]	[illegible]	[illegible]
Lamar §§	Maximum	70	[illegible]	79	86	[illegible]	78	86	85	84	86	90	93	77	77	75	78	85	87	86	71	86	92	88	[illegible]	93	96	95	95	[illegible]	[illegible]
	Minimum	66	56	50	62	64	54	57	60	57	57	68	70	69	49	45	47	55	60	63	53	57	61	66	[illegible]	64	68	66	[illegible]	[illegible]	71
Lamonte	Maximum	73	68	73	85	83	77	84	83	76	82	89	90	80	71	69	71	76	88	83	84	88	91	91	92	90	80	[illegible]	[illegible]	92	[illegible]
	Minimum	56	55	56	61	64	56	54	52	57	55	66	72	56	50	48	44	54	55	55	52	50	65	60	65	64	[illegible]	64	[illegible]	[illegible]	72
Marshall	Maximum	74	69	77	85	84	78	79	82	77	82	88	88	86	72	70	70	84	88	83	82	[illegible]	90	90	91	90	86	93	88	89	[illegible]
	Minimum	57	51	48	62	63	55	57	57	58	55	64	75	54	50	47	42	54	57	58	53	52	64	72	66	63	67	62	[illegible]	62	[illegible]
[illegible]	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	75	72	78	86	85	80	82	86	82	85	90	93	86	74	71	76	85	89	82	81	87	91	90	96	94	95	95	95	93	102
	Minimum	58	58	46	63	65	45	57	52	56	52	64	67	56	45	38	39	51	50	60	47	56	58	71	63	63	64	65	65	55	71
[illegible]																															
[illegible]	Maximum	67	[illegible]	76	76	78	71	78	82	78	80	89	89	76	71	70	70	85	87	84	84	87	91	89	95	81	81	89	88	87	91
	Minimum	54	[illegible]	47	[illegible]	59	56	56	57	61	55	65	65	56	52	46	40	52	61	52	54	56	[illegible]	70	66	62	[illegible]	62	62	60	[illegible]
[illegible]	Maximum	[illegible]	[illegible]	76	76	73	[illegible]	77	77	78	80	91	83	75	68	69	72	90	88	84	[illegible]	83	92	93	91	95	82	83	83	85	97
	Minimum	[illegible]	49	49	[illegible]	59	54	53	56	55	58	67	60	53	52	46	49	[illegible]	55	[illegible]	58	59	62	70	61	66	64	63	62	64	67
[illegible] City	Maximum	[illegible]	67	76	[illegible]	81	72	80	80	79	84	90	92	81	72	72	72	88	87	83	79	86	89	92	90	91	84	93	86	87	102
	Minimum	[illegible]	[illegible]	56	64	60	[illegible]	58	59	58	63	69	71	57	58	52	52	58	64	61	64	61	69	75	68	70	70	66	66	66	76
[illegible]	Maximum	66	[illegible]	73	77	75	69	70	78	77	80	88	89	71	70	68	70	[illegible]	85	82	81	81	86	92	88	90	84	86	83	80	100
	Minimum	[illegible]	52	54	64	63	57	54	58	57	59	66	66	55	51	45	50	58	62	54	62	60	65	74	63	67	73	64	65	64	68
[illegible] §§	Maximum	[illegible]	[illegible]	77	[illegible]	80	73	79	[illegible]	78	83	90	90	75	73	70	70	87	90	84	82	87	91	92	94	91	88	92	88	90	100
	Minimum	[illegible]	[illegible]	[illegible]	62	64	56	55	58	58	57	67	70	59	55	46	48	57	61	58	58	55	65	73	65	68	72	66	67	60	72
[illegible] §§	Maximum	64	68	79	80	75	79	79	76	80	79	93	87	75	73	72	79	90	81	[illegible]	80	85	88	90	90	91	77	85	82	85	99
	Minimum	[illegible]	47	47	[illegible]	58	52	54	[illegible]	53	56	65	60	43	54	42	42	49	60	52	56	58	61	65	61	[illegible]	61	62	[illegible]	64	62
[illegible]	Maximum	64	66	73	76	74	70	[illegible]	70	[illegible]	79	88	88	80	72	70	75	86	83	82	80	83	89	[illegible]	88	89	[illegible]	[illegible]	83	[illegible]	96
	Minimum	[illegible]	47	49	[illegible]	58	54	48	46	53	57	67	[illegible]	53	51	45	[illegible]	57	62	54	60	56	[illegible]	69	62	68	62	64	62	64	70
[illegible]	Maximum	[illegible]	[illegible]	[illegible]	77	78	71	[illegible]	76	79	[illegible]	92	92	74	72	72	74	89	85	84	83	87	91	93	93	92	85	92	[illegible]	88	101
	Minimum	[illegible]	[illegible]	[illegible]	64	59	56	54	60	57	62	69	66	56	56	49	53	64	66	58	64	60	67	74	66	74	63	66	[illegible]	64	77
[illegible]	Maximum	[illegible]	[illegible]	77	73	77	73	[illegible]	81	76	78	88	87	86	70	66	70	85	85	84	80	84	88	88	88	89	87	85	83	83	94
	Minimum	53	[illegible]	54	[illegible]	64	58	[illegible]	[illegible]	59	[illegible]	[illegible]	65	55	53	46	48	55	61	58	59	60	66	71	69	68	66	64	64	64	69

[illegible] 1, 2, 3 etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged [illegible]


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR JUNE, 1917, AT THE UNIVERSITY OF MI COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 45 and 46.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, northwest; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 BWG iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consist of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau sta described in Circular L. Horizontal distance of the anemome pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 11 feet. Distance of rain gage f 2.6 feet. The ground in the immediate vicinity of the pan slope north, average 5 per cent grade. The soil is covered by blue g being part of the University campus. There are no bodies of wa nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by Philip G. McGinnis, observer, Weather Bureau. This is one of the "Class A" stati signed to furnish practical information relative to evaporation. F complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for June, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.064	.108	.102	.175	.212	.148	.291	.187	219	143	.224	.256	161	.217	.286	.231	.166	.224	.270	.280	.159	228	329	.166	214	.205	[illegible]	.219	.218	.248
Daily wind movement	31	46	35	26	52	57	43	25	26	34	22	33	28	45	62	36	20	28	24	28	9	20	33	19	20	33	16	23	26	26

*Total in next following measurement.

| Indicates minus (−)

Observations taken at

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	2.48	−1.06	1.45	0	7	22	2	6	s.	G. V. Randolph.
Boonville	40	2.93	−2.76	0.98	0	9	23	2	5	se.	C. Randecker.
Cape Girardeau	10	2.94	−0.75	1.10	0	7	21	3	6	s.	D. L. Albert.
Glencoe	0	0.34	....	0.20	0	5	19	7	4	s.	Vint R. Noel.
Hermann	43	2.27	−2.32	1.36	0	11	14	10	6	sw.	C. T. Maushund.
New Madrid	23	5.49	+1.39	1.45	0	11	18	3	9	se.	Miss Josie Smith.
Pacific	0	0.52	....	0.20	0	8	22	4	4	......	R. C. Dougherty.
Steelville	15	1.10	−3.12	0.33	0	7	24	0	6	s.	Wm. J. Drennen.
Tuscumbia	0	1.89	....	1.18	0	7	20	4	6	s.	C. B. Wright.
Union	0	0.93	....	0.36	0	8	18	6	6	sw.	J. Wm. Keller.
Valley Park	0	0.57	....	0.15	0	9	20	5	5	sw.	H. J. Lucksinger.
Waverly	2	2.07	....	0.78	0	8	20	5	5	sw.	J. W. Cauthorn.

Important Miscellaneous Phenomena.

There was a veritable downpour of rain accompanied by heavy hail in Linn County on the afternoon of the 3d. At St. Catherine, 2.45 inches of rain fell between 1.00 and 3.00 p. m., and at Bucklin nearly four inches fell in the same time. Streets in Bucklin suddenly became creeks, while window-panes and flat roofs were damaged by the hail.

The storm came from the northwest, and extended from Sullivan County to ten miles southeast of Bucklin, Linn County. Practically all parts of Linn County reported bridges washed out, live stock drowned, and low lands flooded.

Heavy damage occurred also in the lowlands of the Grand and the One Hundred and Two rivers and their tributaries from the 4th to the 6th. From the 10th to the 15th, practically all bottom lands in nothern Missouri, including the Missouri River bottom, and that of the Mississippi River north of St. Louis, suffered heavy flood damage.

VIOLENT STORMS: Four well developed tornadoes occurred in northern Missouri in June, three on the 5th and one on the 13th.

The first storm of the 5th formed five miles southwest of Clark Fork, in Cooper County, at about 8.30 p. m. and traveled northeast across Boone County to Centralia, where it struck at 9.50 p. m. It passed within one-quarter of a mile of Gooch Mills, about halfway between Overton and Woolridge and struck Boone County three and one-half miles southwest of Rocheport near what is known as the Rocheport Cave. It passed through or near [illegible], New Providence, Hinton, Hallsville and Centralia in the order named. The path varied between one-fourth mile and 75 yards in width, and totaled 40 miles in length.

Four persons were killed and ten injured in Cooper County, while in Boone eighteen were killed and [illegible] injured. The property loss in the two counties combined is estimated at [illegible], which occurred in Centralia, where 27 houses were destroyed and [illegible] persons killed.

[illegible] the tornado continued still further to the northeast, but high in the air, [illegible] path was extended across Audrain, Monroe, and Ralls counties, [illegible] at the towns crossed by this extended line. As was supposed, [illegible] come to light, tending to prove that the storm did pursue such a course.

[illegible] the banks of Long's Branch, in Monroe County, five miles west of Santa Fe, parts of a baby carriage and an inside door of a dwelling house were found: articles of clothing, a child's romper and a woman's dress were found farther northeast, near the junction of Brush Creek with Salt River, while near Spaud farther to the northeast in Ralls County, a check drawn on a Columbia bank ment for Boone County taxes, was found in a farmer's field. According to a port, apparently accurate, a marriage certificate belonging to victims near Go was found by a young woman of Kellerville, Adams County, Ill. All of the plac cated lie in an almost straight line extended in the direction of the storm across and Boone counties.

The second storm on the 5th, originated apparently about two miles south Richmond, Ray County, at 7.40 p. m. It traveled to one mile northeast of Ste tance of twenty miles, which was traversed in 27 minutes. The path, 100 yards was in many places swept clean of all obstructions, and one observer mentioned heavy sod pasture was changed in an instant to the appearance of a freshly field. Two persons, the wife and child of Gerald Brown, were found dead in yards from their position when struck by the storm. A total of four dead, four and a property loss of $26,000 was the toll exacted.

A third tornado of the 5th apparently developed in Carroll County to the south worth, and closely paralleled the Santa Fe track to Snyder (known also as Dean and Whitham, where it struck at 9.00 p. m. The path of the storm did not a over 50 yards in width, and the damage occurred at intervals when the storm d earth. One person was killed near Whitham, seven or eight were injured, and p estimated at $15,000 was destroyed.

The concluding tornado of the remarkable series of storms visiting Missouri fro 21st to June 13th occurred in northern Mercer County on the afternoon of the las mentioned. Its path averaged about 100 yards in width, and was about ten mile Beginning three miles north of Princeton, it passed close to Alvord on the north, south of Mercer, and expended itself on the prairies northeast of Ravenna. Tw sons were killed while seeking more adequate shelter, and six were seriously inju total of 25 fine farm homes with substantial improvements was destroyed. The the storm gave people in the path of the storm ample time to seek shelter, and as was little or no rain falling at the time, the outline of the funnel shaped cloud co readily discerned. Although very little rain fell, there was a thick layer of m nearly every leaf remaining on the trees, while animals that were killed by the looked as though they had been rolled in mud.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JULY, 1917

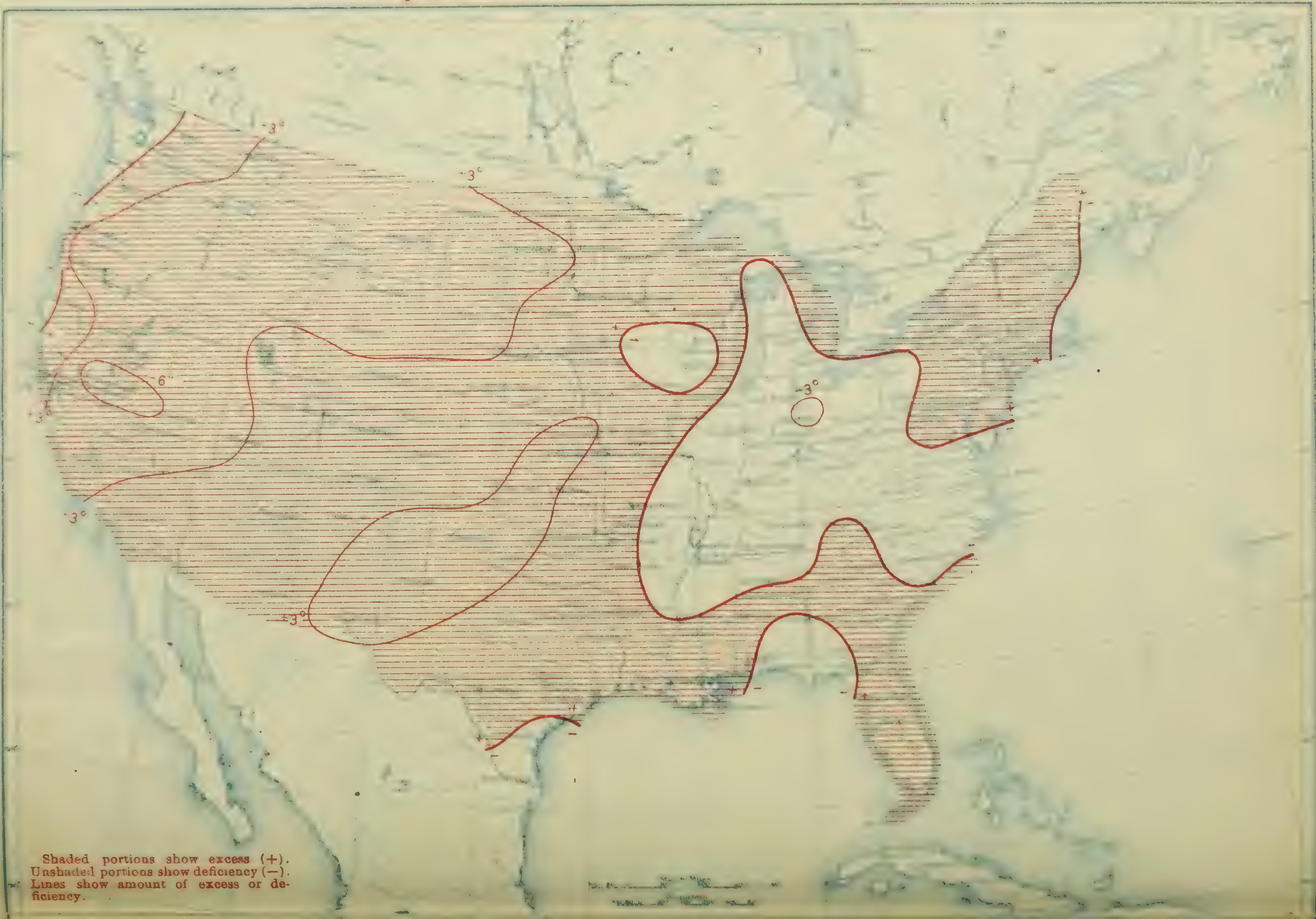
BY

GEORGE REEDER
METEOROLOGIST

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
AUGUST 24, 1917.

Departure of the Mean Temperature from the Normal, July, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

. XXI. COLUMBIA, MO., JULY, 1917. No. 7.

GENERAL SUMMARY.

The weather of July, 1917, in Missouri, was marked by her unusual local conditions, resulting in uneven distribution sunshine, warmth, and precipitation.

n the central section of the State, on both sides of the Missouri River extending from about Warren County in the east to kson County in the west, the month was characterized by n precipitation, intense sunshine, and high temperature, ticularly during the last ten days. Over the northern part the State, neither excessive heat nor a lack of moisture was cially felt until the last week; while over the southern slope he Ozark Plateau conditions were nearly ideal for farm work l crop growth during the entire month. The last five or six s, however, were very trying over the entire northern two-rds of the State, and rapidly took moisture from the soil in southern sections.

The month was favorable for harvesting of wheat, oats and . The weather also was favorable for corn, except in the ral sections on both sides of the Missouri River, and the few days of the month in the northern counties. In the ral sections, intense sunshine and dry weather with hot ds caused corn to curl and fire, and in some localities turned tassels white. At the close of the month, though, the bulk he corn crop was uninjured.

A good hay crop was made. Early potatoes turned out well, the late crop was damaged in the drought section. Pastures re parched and dry in the drought section, but were good where. In the southeastern counties sunshine and dry ther were needed for cotton and lowland corn.

Thunderstorms were frequent, but no damaging winds occurred.

TEMPERATURE.

The monthly mean temperature for the State, as shown by records of 71 stations, was 77.5°. The mean departure from normal for 66 stations having 10 or more years' record was s 0.2°. By divisions, the northeastern plain and southeastern lands were slightly cooler than normal, while the Ozark au and northwestern plateau were warmer than normal, the rmth of the latter being more or less marked. The weather this July was in marked contrast to the conditions experienc- during July of last year, which was excessively hot and dry. ring last July the weather of the Ozark Plateau, because of greater elevation, was not as warm as the other divisions of State. During the present month of July, however, the teau regions were a little warmer than the lower lands, owing the fact that the rainfall from and including the northern pe of the Ozarks to and across the northwestern plateau was arkedly less than in the other divisions. The highest month-mean was 82.1°, at Avalon in the north-central part of the ate, and the lowest, 74.3°, occurred at Cassville, in the south-st part of the Ozarks. The highest temperature recorded was 7°, at Mexico on the 31st. The last six days of the month re the warmest, when maximum temperatures reached or exceded 100° at a few stations in all divisions. The minimum r the month was 42°, at Steffenville on the 3d and 4th.

PRECIPITATION.

The average precipitation for the State, 88 stations reporting, as 2.96 inches. The mean departure from the normal for 74 ations having 10 or more years' record was minus 1.22 inches. he precipitation was unevenly distributed over the State. It as somewhat in excess of the normal in the Ozark Plateau and utheastern lowlands, and was below normal in the other three ivisions, the most marked deficiency occurring in the northwestern plateau. Boone, Saline, Cass, Lafayette, Harrison, Nodaway nd Atchison counties were the only counties, however, that re- ived less than 1 inch for the month. The first general rain of e month occurred on the 8th; the second was a period from e 13th to the 16th, when good general showers fell in the Oz- rks, and rather light to moderate elsewhere. The third showery period was from the 22d to the 27th, being very scattering in the Northwest, more general elsewhere and rather more generous in the Ozarks than in the plains or lowlands.

The greatest monthly precipitation was 7.73 inches, at Dean, and the least was 0.13 inch, at Conception. The greatest amount in any twenty-four consecutive hours was 3.40 inches, at Dean, on the 14th. At Brunswick, between the hours of 2 a.m. and 4 a.m. on the 6th, 2.15 inches of rain fell, and caused the creeks in the vicinity to overflow. This was the heaviest rain reported for the month north of the Missouri River. The average number of days with 0.01 inch or more precipitation was 8.

EVAPORATION.

The total evaporation for the month, at Columbia, Mo., was 7.28 inches; the total rainfall was 0.93 inch; the total wind movement over the surface of the pan was 830 miles, and the mean temperature, 78°. During the same month in 1916, these data were, in order named, 7.52 inches; 0.62 inch; 616 miles, and 82°. The evaporations during the two months named were dominated by unusually dry weather and intense sunshine, and very likely represent the maximum amount that may occur at this station.

WIND.

The prevailing winds were from the south. The average monthly wind movement for the State, 8 stations reporting, was 5,876 miles, about 10 per cent in excess of the normal. No damaging winds occurred but local thunder squalls of 40 miles or more per hour occurred on the 6th, 12th, 26th, and 27th.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 380, about 83 per cent of the possible and 12 per cent above the normal. At Columbia, the total number of hours of sunshine was 405.5, or 90 per cent of the possible. This exceeds all previous records for July or any other month at this station since sunshine records began in 1898.

MISCELLANEOUS PHENOMENA.

Hail---13th, 14th, and 16th. Halos, solar---3d, 4th, and 5th. Lunar---4th, and 5th. Thunderstorms---(more or less general) 1st, 6th, 7th, 8th, 12th, 13th, 14th, 15th, 16th, 22d, and 23d.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Max. velocity. Direction.	Max. velocity. Date.
Columbia	29.93	81	......	406	90	4,722	6.4	34	nw.	6
Hannibal	29.93	80	......	......	......	5,700	7.7	40	sw.	6
Kansas City	29.90	70	42	374	83	7,433	10.0	35	ne.	13
St. Joseph	29.90	78	43	417	92	5,136	6.9	43	w.	12
St. Louis	29.94	76	58	357	79	7,777	10.5	47	nw.	27
Springfield	29.96	79	56	305	68	6,624	8.9	33	nw.	14
Cairo, Ill	29.95	84	68	......	......	4,977	6.7	40	nw.	26
Keokuk, Iowa	29.94	78	56	397	87	4,640	6.2	32	sw.	22

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	79.3	+2.3	111	50	3.31	−0.98	......	0.0	7	....	....	....
1889	77.1	+0.1	107	46	3.75	−0.54	......	0.0	8	....	....	....
1890	79.6	+2.6	106	52	2.98	−1.31	......	0.0	5	....	....	....
1891	72.7	−4.3	103	40	3.55	−0.74	......	0.0	8	....	....	....
1892	75 8	−1.2	101	45	4.99	+0.70	4.75	0.0	8	12	10	9
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	0.0	8	14	12	5
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	0.0	5	18	10	3
1895	74 4	−2.6	106	45	6.79	+2.50	6.52	0.0	10	10	12	9
1896	77.3	+0.3	108	48	5.87	+1 58	8.00	0.0	9	15	11	5
1897	78.7	+1.7	106	48	3.22	−1.07	4.05	0.0	6	19	9	3
1898	76.1	−0.9	104	42	5.58	+1.29	8 15	0.0	9	16	10	5
1899	76.0	−1 0	102	43	4.51	+0.22	4.48	0 0	9	15	11	5
1900	76.9	−0.1	102	46	4.11	−0.18	7.03	0.0	8	17	10	4
1901	85 4	+8.4	116	46	2.02	−2.27	3.78	0.0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0.0	8	17	11	3
1903	77 4	+0.4	102	51	3.22	−1.07	3.26	0.0	8	17	10	4
1904	74.2	−2.8	100	47	4.65	+0.36	4.15	0.0	10	15	11	5
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	0.0	12	12	10	9
1906	74.7	−2.3	100	48	3.53	+0.76	4.46	0.0	8	17	10	4
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	0.0	8	19	8	4
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	0.0	8	18	9	4
1909	76.7	−0.3	102	41	6.41	+2.12	10.71	0.0	10	17	8	6
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	0.0	9	16	9	6
1911	78.0	+1.0	113	43	3.95	−0.34	4.20	0.0	8	16	9	6
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	0.0	7	18	9	4
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	0.0	7	18	9	4
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	0.0	7	17	9	5
1915	74.6	−2.4	102	42	6 05	+1.59	6.77	0.0	12	14	9	8
1916	81.6	+4.6	109	52	1.25	−3.15	2.55	0.0	3	25	5	1
1917	77.5	+.02	107	42	2.96	−1.22	3.40	0.0	8	20	8	3

Climatological data for July, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observer
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	652	36	78.4	+3.2	101	30	56	3	27	2.67	−2.06	2.15	0	5	22	2	7	sw.	Louis Benecke.
Clifton Hill	Randolph	731	....	75.3	−0.7	104	30	53	3	30	1.84	−2.42	1.29	0	5	25	5	1	......	L. S. Harlan.
Columbia	Boone	784	26	77.6	+0.2	102	30	54	4	27	0.93	−2.72	0.46	0	7	17	11	3	s.	U. S. Weather B
Fayette	Howard	725	31	78.1	+0 7	103	30	55	4	33	1 24	−2.63	0.57	0	6	....	....	....	......	Prof. T. B. Smit
Fulton	Callaway	818	12	77.6	−0.3	102	30	48	4	37	2.06	−2.28	0.70	0	5	25	5	1	s.	Dr. O. M. Weigl
Gorin	Scotland	700	27	......	......	......	......	......	......	....	2.37	−1.93	0.84	0	10	11	14	3	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	77.2	−0.2	102	30	54	4	27	1.71	−2.04	0.70	0	13	16	14	1	sw.	U. S. Weather Bu
Jefferson City	Cole	557	30	78.2	+0.1	101	30†	54	4	31	2 58	−1.06	1.05	0	12	28	2	1	s.	Miss Emma Swif
Keytesville	Chariton	660	3	......	......	......	......	......	......	....	2.49	....	1.48	0	10	....	....	....	......	J. T. Dewey, M. I
Kirksville	Adair	969	24	75.5	−0.6	99	29†	51	4	34	1.80	−2.78	1 11	0	7	22	9	0	s.	Mark Burrows.
Louisiana	Pike	469	38	76.4	+0.4	101	31	50	4	34	2.89	−0.49	0.75	0	9	23	8	0	n.	J. T. Farrell.
Macon	Macon	875	18	76.0	−1.4	102	30†	51	3†	36	2.00	−2.02	0.80	0	8	24	6	1	sw.	John A. Cook.
Mexico	Audrain	797	38	78.1	+0.8	107	31	52	17	36	1.12	−2.90	0.52	0	5	26	0	5	sw.	R. M. Llewellyn.
Oakfield	Franklin	500	35	78.2	+0.4	100	13†	56	4	34	3.68	−0.89	1.72	0	8	8	21	2	w.	E. E. Steines.
Palmyra	Marion	652	4	76.8	−2.3	102	30	51	4	31	2.29	−1.37	1.15	0	8	25	1	5	sw.	W. B. Markell.
St. Catherine	Linn	850	3	75.8	......	97	30†	53	3	28	2.06	....	0.89	0	6	17	14	0	nw.	L. D. Baker.
St. Charles	St. Charles	456	38	77.8	+0.1	100	31	54	4	34	1.91	−1.67	0 59	0	6	12	15	4	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	79.0	−0 1	96	13	62	4	27	3.17	−0.26	1 29	0	10	11	18	2	sw.	U. S. Weather Bu
St. Louis (2)	.....do	578	4	78.7	......	96	13†	61	4	25	2.28	....	0.96	0	10	18	11	2	s.	St. Louis Univer
Shelbina	Shelby	779	24	......	......	......	......	......	......	....	......	....	......	....	....	....	....	....	......	S. G. Parsons.
Steffenville	Lewis	650	23	74 8	−2.4	105	30†	42	3†	47	1.44	−3.60	0.83	0	6	22	9	0	sw.	Frank Hall.
Unionville	Putnam	1,072	23	74.8	−1.9	103	30	45	3	37	1.94	−2.35	0.50	0	7	20	8	3	s.	Geo. W. Davis.
Warrenton	Warren	865	25	78.3	+0.7	101	30	55	4	32	1.56	−2.37	0.51	0	10	13	14	4	s.	Prof. J. H. Frick
Keokuk, Iowa	......	......	....	76.8	−0.2	100	30†	55	3	25	2.65	−1.43	1.77	0	9	17	14	0	s.	U. S. Weather B
Section means and extremes		......	....	77.1	−0.2	107	31	42	3†	47	2.12	−1.96	2.15	0	8	19	10	2	s.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	......	......	......	......	......	......	....	......			....	....	....	....	....	......	F. E. Tate.
Caruthersville	Pemiscott	220	25	81.9	+1.8	104	1	62	17	38	6.40	+2 84	1.77	0	11	22	5	4	w.	H. E. Averill.
Doniphan	Ripley	344	11	78.3	+0.5	98	1	55	4	32	4.86	−1.14	1.66	0	14	18	7	6	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	77.5	+0.4	98	31	49	4	35	5.36	+1.59	1.98	0	10	12	11	8	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	75.4	−1.7	93	7†	55	3	30	5.74	+0.81	1.64	0	8	20	11	0	nw.	Dr. A. F. Hendri
Patton (near)	Bollinger	500	1	......	......	......	......	......	......	....	3.15	....	1.15	0	5	13	0	18	s.	George F. Ellis.
Poplar Bluff	Butler	339	12	76.0	−2.5	96	1	54	4	33	5.62	+1.87	1.92	0	12	17	3	11	......	Miss Belle Kinne
Sikeston	Scott	328	15	76.4	−1.5	98	1	56	4	32	3.34	−0.99	1.00	0	6	19	9	3	sw.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	78.0	−0.6	93	1	63	16	22	4.74	+1.29	2.53	0	11	10	14	7	sw.	U. S. Weather Bu
Section means and extremes		......	....	77.6	−0.5	104	1	49	4	38	4.90	+0.90	2.53	0	10	16	8	7	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	75.4^{a}	−0.8	95	7	53	4	33	3.44	−1.02	1.26	0	9	21	6	4	w.	V. H. Kirkendal
Bolivar	Polk	1,071	28	74.1	−3.0	92	31	52	4	34	4.60	+0.73	1.23	0	9	20	9	2	se.	A. C. Fink.
Cassville	Barry	1,500	5	74.3	......	95	1	51	3†	39	6.04	+1.28	2.97	0	6	26	5	0	s.	Mrs. Zuma Bloo
Crocker	Pulaski	1,126	5	81 4	+4.3	95	25†	68	1	25	2.70	....	2.00	0	4	....	....	....	......	Roy W. Reed.
Dean	McDonald	1,000	17	77.6	+0.1	100	8	52	3†	39	7.73	+3.45	3.40	0	7	24	5	2	......	H. E. Dean.
Eldon	Miller	934	15	76.6	−0.3	99	30†	52	3	37	2.36	−1.79	0.70	0	8	5	23	3	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	77.8	......	101	1	56	4	33	3.71	−0.22	1.15	0	8	21	5	5	s.	R. C. Walton.
Gano	Dent	1,250	12	76.6	−0.1	97	31	55	5	37	4.36	+0.11	2.98	0	7	19	12	0	sw.	A. C. Leach.
Goodland	Iron	1,000	11	75.4	−0.1	100	31	44	4	49	3.18	+1.28	0.97	0	9	16	15	0	w.	F. M. Adams.
Hollister	Taney	735	7	79.0	−0.3	102	1	58	4	36	6.60	+2.07	2.20	0	7	20	0	11	sw.	W. P. Chapmann
Houston	Texas	1,280	23	76.2	+0.3	96	1	49	4	38	3 35	−1.41	0.94	0	8	19	8	4	sw.	R. F. Harmon.
Ironton	Iron	925	38	74.8	−1.0	97	1	43	4	41	6.49	+2.03	2.08	0	13	12	9	10	sw.	W. H. Delano.
Koshkonong	Oregon	958	15	77.7	−0.3	98	1	55	4	30	6.23	+1 91	2.23	0	12	16	10	5	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	76.8	−0.1	97	8	54	3	38	2.69	−1.65	0.80	0	11	22	5	4	s	Leonard E. Dicke
Lockwood	Dade	1,078	21	78.0	+0.9	97	7	59	3	31	5.34	−0.17	2.73	0	9	22	8	1	se.	C. S. Crow.
Mountain Grove	Wright	1,490	17	75.0	−1.0	95	13	50	3	38	4.87	+0.61	1.57	0	11	14	13	4	s	Mo. Fruit Exp. St
Mount Vernon	Lawrence	1,480	37	......	......	......	......	......	......	....	......	....	......	....	....	....	....	....	......	C. L. White.
Neosho	Newton	1,011	33	76.9	−0.7	97	8	51	3	37	6.24	+1.88	1.64	0	10	27	3	1	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	77.6	+0.5	96	8†	51	4	38	4.10	−0.04	0.99	0	7	19	11	1	sw.	Prof. Elmo G. Ha
Springfield	Greene	1,350	28	76.5	+0.1	94	7	59	16	25	4.15	−0.64	1.25	0	9	20	8	3	s.	U. S. Weather Bu
Section means and extremes		......	....	76.7	−0.1	102	1	43	4	49	4.64	+0.47	3.40	0	9	19	9	2	sw.	
Southwest Plain.																				
Amoret	Bates	831	7	76.8	−0.5	100	8	53	2	33	3.38	−1.38	1.14	0	6	15	7	9	sw.	Darby Fruit Farm
Appleton City	St. Clair	853	25	79.0	+0.8	97	6†	56	17	32	3.64	−1.34	1.35	0	10	19	12	0	se.	W. G. Bigelow.
Clinton	Henry	765	29	80.4	+3.4	102	30	55	3	36	1.95	−2.34	0.55	0	7	24	6	1	se.	A. E. Derwent, M.
Harrisonville	Cass	912	43	79.2	+1.5	104	30	55	3	34	0.67	−3.32	0.38	0	7	18	2	11	sw.	A. J. Sharp.
Lamar	Barton	980	35	79.2	+0.8	100	7	58	16†	33	6.19	+1.70	1.77	0	13	16	11	4	s.	Joe W. Springer
Lamonte	Pettis	863	27	77.4	−2.1	101	30	50	3	37	1.17	−3.07	0.75	0	3	19	12	0	nw.	J. Ed. Hall.
Marshall	Saline	779	25	78.4^{c}	+1.4	103	30†	52	4	36	0.61	−3.81	0.29	0	5	14^{b}	15^{b}	0^{b}	sw.	Dr. W. H. Black.
Nevada	Vernon	860	22	78.3	−2.2	98	13†	56	3	36	4.75	+0.44	2.25	0	9	24	7	0	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	79.6	+1.5	104	31	54	15	36	1.68	−2.43	0 66	0	4	24	7	0	sw.	Geo. H. Collins.
Warsaw	Benton	687	11	78.8	+0.6	102	31	50	4	41	2.47	−2.21	1.02	0	9	13	18	0	sw.	J. R. Smith, M. D.
Section means and extremes		......	....	78.8	+0.6	104	30†	50	3†	41	2.65	−1.78	2.25	0	7	19	10	2	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	82.1	+3.2	102	30	59	16	25	2.58	−1.76	1.75	0	5	26	5	0	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	76.8	+1.1	104	30	48	3	35	0.57	−4.07	0.45	0	3	15	16	0	sw.	M. H. Moulton.
Chillicothe	Livingston	......	....	76.8	−5.0	102	31	50	3	36	2 54	....	1.01	0	7	25	0	5	sw.	Dr. J. R. Campbel
Conception	Nodaway	982	31	78.7	+2.8	104	30	53	3	33	0.13	−4.23	0.08	0	2	20	11	0	nw.	Fr. Adelhelm Hess
Gallatin	Daviess	803	16	......	......	......	......	......	......	....	1.71	−3.05	1.05	0	6	25	6	0	nw.	Robert R. Wynne.
Grant City	Worth	1,134	23	77.2	+1.6	105	30	52	3	36	2 20	−2.89	0.90	0	3	29	1	1	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	79.9	+2.3	100	30	60	17	28	1.02	−3.82	0.29	0	8	21	9	1	s.	U. S. Weather Bur
Kidder	Caldwell	1,020	25	78.0	+1.3	105	31	54	17	31	1.16	−3.05	0.38	0	9	25	4	2	sw.	J. F. Sharp.
Lexington	Lafayette	688	34	79.4	+2.6	102	31	55	3	33	0.47	−4.73	0.16	0	5	27	0	4	s.	J. W. Keithley.
Liberty	Clay	864	27	79.0^{a}	+1.3	104	30	53	3	35	1.45	−3.30	0.92	0	4	26	4	1	se.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	77.0	+1.5	105	30	51	3	35	0.67	−5.21	0.37	0	6	26	4	1	s.	J. R. Brink.
Oregon	Holt	1,048	60	76.7	+1.3	102	30	54	3	31	1.38	−3.01	0.83	0	6	21	9	1	se.	Tom Curry.
St Joseph	Buchanan	967	44	79.7	......	103	30	56	3	31	1.04	−2.90	0 62	0	9	22	8	1	s.	U. S. Weather Bur
Tarkio	Atchison	976	4	77.6	+0 8	103	31	52	3	33	0.37	−3.58	0.14	0	4	27	4	0	nw.	John F. Frazier.
Trenton	Grundy	822	21	76.9	+0.4	99	30†	55	3	27	1.52	−2.60	0.95	0	3	21	10	0	s.	W. H. Estes.
Section means and extremes		......	....	78.3	+1.2	105	30†	48	3	36	1.25	−3.44	1 75	0	5	24	6	1	s.	
State means and extremes		......	....	77.5	+0.2	107	31	42	3†	47	2.96	−1.22	3.40	0	8	20	8	3	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete rep used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5.

Daily precipitation for July, 1917.

tations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
east Plain.																																	
	Missouri		.10				.08			T				.02	.30	.08	.03					T.			T.	.16	.12	.24					1.13
k	Grand	T.					2.15			.04				.06	.20												.22						2.67
Hill ‖	Chariton						1.29		.19	.01					.05		.30																1.84
**	Missouri	T.					.30		.01					.03	.46	.01		T					T.		.11	.01	T.						0.93
	do	T.					.57		.03					.12	.05	.10	T.	T.					T.	T.	T.		.37						1.24
	do						.70			T.				.03	.43									.38		.52							2.06
	Meramec	.70					.20	T.		.13			T.	T.	.35	.29								.01	.02		1.42	.50					3.62
	Mississippi	.15					.35		.84						.01	T.	.02						.17	.52	.13	.13	.05						2.37
***	do	.02					.04		.70				.21	.01	.02	.08	.03						.25	.25	.04	.02	.04						1.71
	Missouri		.04				.78			.01				.05	.36	.16				T.							.92	.02					2.34
City ‡	do						1.05			.04				.05	.40	.26	.02	.15						.02	.05	.06	.27	.21					2.58
le	Chariton	T.					1.48	.01						.03	.08	.02	.37				.36		.01	.12		.01							2.49
	Mississippi	.19					.05		.03					.30			1.11						.04				.08						1.80
	do	.75					.61		.34					.14		.16							.12	.48		T.	.23	.06					2.89
	Chariton	.01	.06				.80			.02					T.		.80	.02	.24				T.				.05						2.00
	Mississippi						.52								.27		.05								.10		.18						1.12
	Meramec						.14		.25			T.		.03	.70						T.		T.	.36	.11	1.72	T.	.37					3.68
	do	T.					T.			T.				T.	.34					T.				T.	.04	.01	1.03	.53					1.95
	Mississippi	T.					.02			.17				.25	T.		.09	.27						.02	1.15	.32							2.29
me	Grand	.12					.89		.02						T.	T.	.09	T.					.24				.70						2.06
	Missouri						.20		T.	.22		T.			.59				T.				.23	T.	.12		T.	.55					1.91
1***	Mississippi						.23		T.			T.		T.	.45		.08		.01	.10			T.	1.29	.13	.03	.11	.74					3.17
2)	do						.33		T.			T.		.01	.44		.08			.02			.01	.23	.03	.17	T.	.96					2.28
	do	.11					T.		T					.15		.05	.18						T.	.83		.12							1.44
	Meramec						.10							.02	.40	.28				.29				.14	.19		.18	1.25					2.85
	Grand	T.					.40			T.				.50	.10		.30	.20						.40	.04								1.94
k ‖	Meramec	1.23					.18	T.		T.			T.	.05	.25	.34		T.				.01		.09	T.	T.	.07	.39					2.61
	Mississippi		T.				.15			T.				.03	.48	.12						T.		.03	.12	.10	.51	.01	.01				1.56
Lowlands.																																	
deau‖ ‖	Mississippi							.25		.05						1 60	.02					.25		.40	.05			.60					3.22
ille	do		.07				1.75			.45	.05	T.			T.	1.77	.55			.03	T.	.37	T.	.97	.27	.12		T.					6.40
	Black		.40				.15			1.66		.03			.12	1.25	.06			.17	.13	.05	.30		.42	.10		.02					4.86
	Mississippi		.20				.57		.06			.05		.02	1.20		.02						.48	.78			1.98						5.36
	do						1.15			.05				.25		.75					.25			1.64			1.40	.22					5.71
	do		.02					1.10		.14						1.80	.01	.10						3.05	.16		.64	.20					7.22
	do							.70							1.15	.05		.50								.75							3.15
	Black	T.	.05					.55		.90			.80		.01	1.92	.05	.10			T.	.21	T.	1.01	.01	T.	T.	.01					5.62
	Mississippi														1.00	.82	.17							1.00		.15		.20					3.34
**	do		.26				.21		.01	.52				.01	2.50	.03	.83		T.			T.	T.	.35		T.	.01	.01					4.74
lean.																																	
	Gasconade						.40								.55	.35	.10	T.						.98	.68	.54	.15		.68				4.43
	Meramec																																......
	Black		.07				.20								.36	.50				.20	.10		.65	.10	1.26								3.44
	Osage						.48		.88						.89	.17			.20				.35	.15	1.23			.25					4.60
	White											T.			.63	2 97	.14						T.	.89	.75	.66							6.04
													2.00			.19						.14			.37								2.70
	Neosho									1.14					3.40	2.00	.46							.34	.29	.10							7.73
	Osage														.70	.31	.14			07			.20	.35	52	.07							2.36
	Black						.60					.10			.40	.15				1.10				1.15			.15		.06				3.71
	Meramec						2.98								.70		.20	T.					T.	.26	04			.04	.14				4.36
	Black		.16				.97								.75	.09				.08			.69	.15	.16		.13						3.18
	White		1.35						.15	1.10						2 20	.15				.20				1.45								6.60
	Gasconade						.58			.21					46	.20				.25			.94	.48	.23	T.	T.	T.	T.				3.35
	Mississippi		.12				.75	.20		2.08			T.	T.	.10	.55	.35				T.			1.30	.12	.20	.04	.45	.23				6.49
g	Black		.70				.16		.03							1.25	.13			1.00	.25		.04	.09	2.23	.04		.31					6.23
	Osage						.10	.05		.05					.10	.16					.43			.80	.23	.30	.45		.02				2.69
	do						.86		.28					.15	.04	.23	.22			T.				2.73	.29	.54							5.34
rove.‡	White		T.				.35	.08		.38					.14	1.48	.08			.12				.34	.23	1.57	.10	T.					4.87
	Neosho																																.....
	do						01		T.	.41		T.		.14	.72	1 08	.19			.37				1.04	.64	1.64							6.24
**	Meramec						.82			T.				T.	.26	.37	T.							.99	82		.42		42				4.10
	White		T.				.28		.07	.14				.29	.79	.37	T.		1.25	T.			T.	.89	T.	T.		.07					4.15
‖	Meramec						1.47								.31	.59								1.11	.26	.09	T.						3.83
	Osage									T.				.02	.23	.45	.06	.02			.25			13	.21	.02	.21						1 60
Plain.																																	
	Osage						.70	T.					T.	.42	.09	T.					.69		1.14				.34					T.	3.38
ly	do	.14					.32	T.	.11	.59				.23	.23	.04				T.			.03	1.35		.60							3.64
	do	.10			.17									.10	.55	.23								.50		.30							1.95
	do					.04	.02		.02	T.				.05	.14	T.		.02						.38									0.67
	Neosho						.32		.85	1.77				.06	.49	22	.97		.59	.18				.47	.05	.10			.12				6.19
	Missouri	T.			T.		T.		T.					T.	.75	.10	T.						.32	T.		T.	T.						1.17
	do	T.					.06							.06	29	.15							.05										0.61
	Osage						.81			.43					.32	.28	.02			.11				.18	.35	2.25							4.75
g	Missouri														.66		.18						.43				.41						1.68
	Osage	T.					.11		.05					.02	1.02	.55							.37	.10		.15		.10					2.47
	Missouri	T.					.10		T.					.22	.12	.08	T.							.05		.05	.09						0.71
Plateau.																																	
	Grand					1.75			.20										.10				.38			.15							2.58
	do	.04					.45		T.						T								.08										0.57
	do	.01					.70							.01			1.01	.01						.40			.40						2.54
	Missouri	.08											T.	T.	.05																		0.13
	Grand	.06			T.		.36	T.	T.				T.	.07	.02		.15						1.05			T.							1.71
**	do	T.					.45	T.	T.				T.	T.	T.		.90						.85										2.20
	Missouri	.05					.29	.18							.24	.04	.05						.09			.08							1.02
	Grand		.05				.38			.05				.22	.05		.02	.05						.33				.01					1.16
	Missouri									.05				.16	.05	.07								.14									0.47
	do						.92	T.	T.					.10	.15									.28									1.45
	do	.03					.12							.06	.06	T.	T.	37					.03										0.67
	do	.05				.83			T.				.15		.21	T.	T.						.03									.11	1.38
	Missouri	.05			.01		.62		.02				.05	.08	.09	T.							.10			T.						.02	1.04
	do											.01	.09	.13	.14																		0.37
	Grand	T.				.95			T.					T.	T.	T.	.07						.50			T.							1.52

…as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the …rvation. ¶. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.

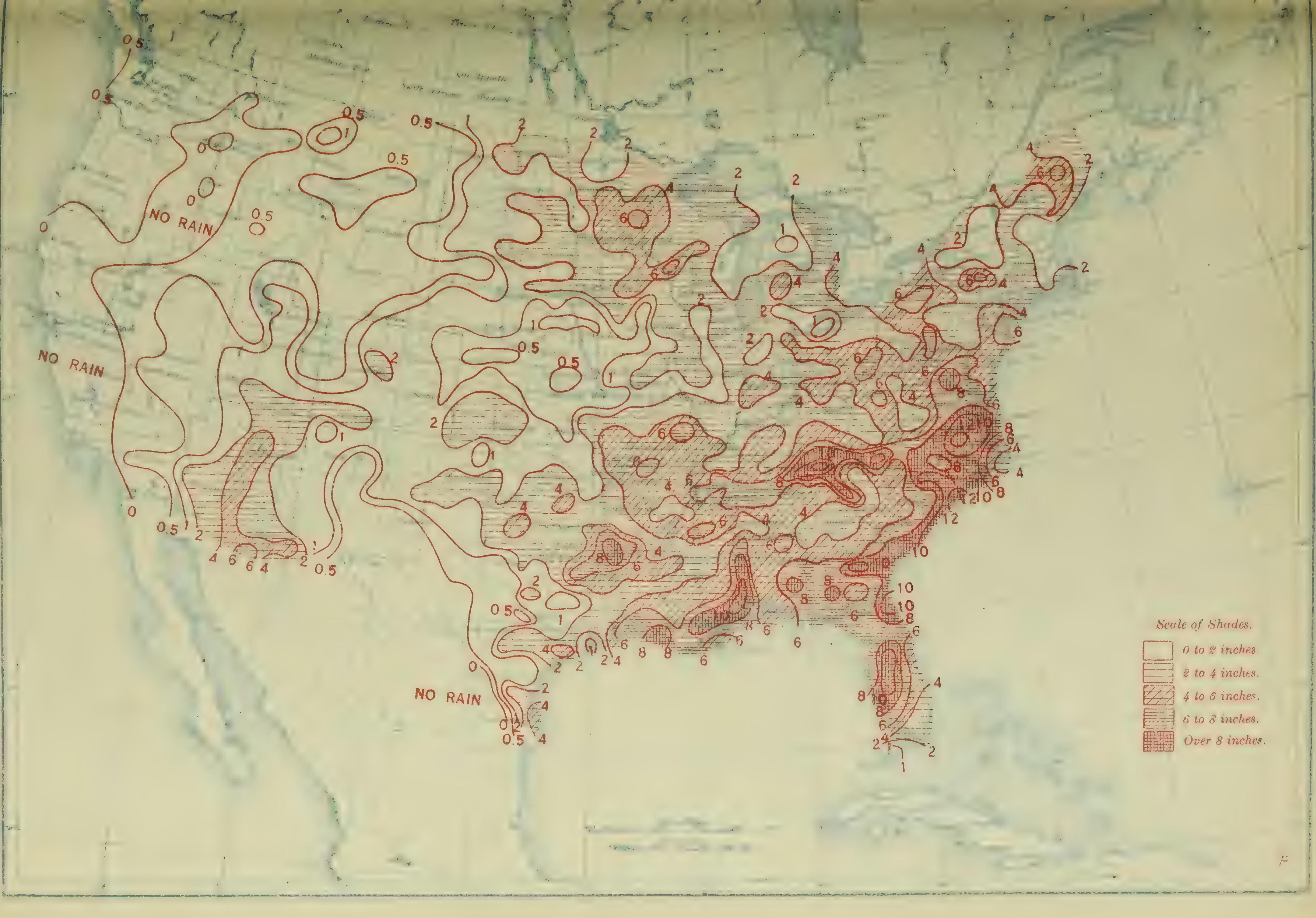
Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate

not recorded.

Daily temperatures for July, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Northeast Plain.																														
Brunswick §§	Maximum	82	84	89	82	88	90	88	82	90	85	88	87	89	82	87	81	84	86	89	90	92	89	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	76	65	56	63	69	67	66	75	70	65	69	61	63	66	63	61	61	61	62	[illegible]	69	[illegible]	65	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]
Columbia	Maximum	82	81	77	81	87	90	89	92	91	85	90	[illegible]	90	79	86	80	82	[illegible]	[illegible]	91	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	67	61	58	51	60	65	64	71	69	62	63	59	68	[illegible]	61	59	[illegible]	[illegible]	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	83	87	80	88	87	90	90	89	91	86	89	86	89	78	86	82	82	87	90	92	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	64	56	55	62	67	71	68	70	60	63	62	68	65	61	[illegible]	[illegible]	61	[illegible]	67	[illegible]	[illegible]	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	83	84	76	86	85	89	88	90	89	82	87	85	90	84	86	79	81	[illegible]	89	90	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	69	60	56	51	61	68	65	68	67	61	65	60	66	65	61	62	60	59	[illegible]	67	69	72	68	[illegible]	69	[illegible]	[illegible]	[illegible]	77
Jefferson City §§	Maximum	86	85	80	85	91	95	91	92	92	87	91	85	95	88	86	83	81	81	89	92	[illegible]	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	76	62	62	51	60	67	65	70	69	63	62	60	66	65	64	61	59	64	62	[illegible]	66	69	[illegible]	[illegible]	[illegible]	74	[illegible]	74
Kirksville	Maximum	90	80	77	78	83	88	88	89	87	88	84	88	88	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	92	[illegible]	[illegible]	[illegible]
	Minimum	70	52	50	51	59	63	63	67	61	58	61	54	62	62	57	56	57	59	58	64	67	71	[illegible]	67	[illegible]	72	72	[illegible]	[illegible]
Louisiana	Maximum	90	84	78	82	86	87	88	88	90	81	90	85	94	85	90	81	82	86	92	92	92	96	84	[illegible]	[illegible]	92	[illegible]	92	[illegible]
	Minimum	72	60	53	50	55	65	63	63	65	60	60	62	63	[illegible]	56	62	56	[illegible]	57	63	[illegible]	66	75	[illegible]	[illegible]	69	72	72	71
Macon §§	Maximum	82	81	76	83	86	88	89	91	90	83	81	84	90	83	86	79	82	87	[illegible]	91	92	91	90	91	88	94	[illegible]	[illegible]	98
	Minimum	70	57	51	51	58	52	63	65	65	58	62	58	61	[illegible]	59	[illegible]	57	58	[illegible]	[illegible]	66	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	75
Mexico §§	Maximum	83	86	80	81	90	90	91	91	93	93	92	87	93	81	89	[illegible]	[illegible]	91	92	[illegible]	95	[illegible]	[illegible]	93	[illegible]	[illegible]	[illegible]	92	[illegible]
	Minimum	73	58	54	45	51	64	61	69	66	62	62	58	66	65	[illegible]	[illegible]	52	57	64	65	66	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	92	86	81	83	87	92	91	93	94	84	[illegible]	87	100	84	87	81	83	88	93	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95
	Minimum	75	63	60	56	61	65	66	68	67	62	62	61	65	65	63	62	58	62	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	69	[illegible]	72
St. Catharine	Maximum	85	82	77	79	84	88	87	86	89	82	86	[illegible]	90	81	86	86	82	[illegible]	87	88	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	94
	Minimum	71	58	53	51	60	65	65	69	66	57	[illegible]	57	67	64	58	58	56	58	60	61	67	70	68	[illegible]	[illegible]	[illegible]	[illegible]	74	74
St. Louis (1)	Maximum	91	81	79	82	85	90	90	91	91	83	91	84	96	81	84	83	82	83	[illegible]	90	[illegible]	[illegible]	87	87	[illegible]	[illegible]	92	[illegible]	94
	Minimum	76	69	61	62	65	68	72	71	73	[illegible]	69	67	69	67	67	68	64	68	69	68	69	73	67	70	72	70	[illegible]	77	77
Unionvill §§	Maximum	86	81	78	81	84	86	92	90	88	87	85	[illegible]	86	85	87	82	85	90	92	94	[illegible]	[illegible]	88	[illegible]	[illegible]	93	[illegible]	[illegible]	[illegible]
	Minimum	70	54	45	47	52	60	59	61	63	53	55	54	56	58	[illegible]	54	55	56	55	58	56	58	[illegible]	[illegible]	64	65	70	72	73
Warrenton §§	Maximum	87	88	89	88	91	92	93	98	95	87	94	88	95	81	91	[illegible]	81	92	93	[illegible]	95	[illegible]	90	92	[illegible]	[illegible]	[illegible]	[illegible]	97
	Minimum	72	61	60	55	60	58	62	64	67	60	62	60	65	65	[illegible]	61	59	64	64	63	65	68	67	[illegible]	68	70	75	72	73
Southeast Lowlands.																														
Caruthersville	Maximum	104	91	91	93	96	88	102	99	99	93	93	91	98	98	80	88	91	93	88	90	90	93	92	95	93	95	97	[illegible]	101
	Minimum	[illegible]	70	68	65	68	65	68	72	72	73	65	70	63	76	67	65	62	65	70	[illegible]	64	68	71	70	71	73	74	74	[illegible]
Doniphan	Maximum	98	86	86	85	89	88	95	95	93	87	92	88	92	95	78	85	86	86	80	84	85	90	90	[illegible]	88	92	89	[illegible]	94
	Minimum	78	67	64	55	73	76	68	[illegible]	68	69	63	62	60	73	[illegible]	66	63	61	66	63	68	66	[illegible]	[illegible]	72	71	71	70	71
Jackson	Maximum	89	88	84	84	89	86	93	93	95	92	97	92	85	80	86	85	90	84	90	91	92	[illegible]	88	89	92	92	[illegible]	[illegible]	[illegible]
	Minimum	65	66	56	49	57	63	65	64	67	58	62	59	67	67	65	61	60	64	60	60	64	68	68	70	68	65	79	72	72
Marble Hill	Maximum	72	73	74	75	86	82	93	[illegible]	93	85	91	87	83	90	78	87	89	88	80	[illegible]	[illegible]	[illegible]	89	87	85	89	87	92	90
	Minimum	59	60	55	68	[illegible]	62	70	65	67	65	60	60	68	[illegible]	67	[illegible]	62	59	64	[illegible]	62	[illegible]	67	68	75	67	67	[illegible]	71
Poplar Bluff §§	Maximum	96	87	87	84	88	85	93	95	90	85	90	82	83	92	78	82	85	86	82	87	84	88	86	82	88	90	[illegible]	[illegible]	91
	Minimum	63	65	63	51	58	63	66	66	66	68	64	60	60	62	67	66	61	63	64	62	65	[illegible]	67	65	66	69	71	70	70
Ozark Plateau.																														
Birchtree	Maximum	91	84	82	83	85	87	95	94	91	89	94	87	91	85	78	82	85	86	78	84	87	80	[illegible]	83	83	90	..	92	89
	Minimum	68	61	56	53	60	67	[illegible]	[illegible]	67	64	61	59	61	61	66	59	58	59	60	62	66	65	67	65	70	70	....	[illegible]	70
Cassville	Maximum	95	83	84	82	94	89	94	91	92	90	[illegible]	90	90	95	81	83	84	81	85	82	85	84	92	82	85	88	[illegible]	[illegible]	88
	Minimum	70	63	57	62	70	64	63	63	59	68	51	51	68	68	61	56	58	56	60	66	[illegible]	64	[illegible]	68	[illegible]	68	68	68	67
Eldon	Maximum	90	89	84	[illegible]	89	95	97	[illegible]	96	92	95	92	95	83	83	82	85	90	86	90	91	94	[illegible]	82	87	[illegible]	90	90	93
	Minimum	73	57	52	55	[illegible]	68	65	67	63	58	58	58	65	71	64	58	57	59	61	61	62	67	63	61	63	66	72	55	71
Fruit City	Maximum	101	[illegible]	[illegible]	[illegible]	92	88	[illegible]	[illegible]	92	95	94	85	92	85	77	81	85	87	80	86	85	86	87	81	84	88	85	91	90
	Minimum	69	67	59	56	70	[illegible]	68	68	70	67	65	62	65	69	68	67	61	64	62	63	[illegible]	66	65	61	70	73	72	71	71
Gano	Maximum	92	87	84	87	92	91	[illegible]	94	90	83	90	84	94	81	[illegible]	80	81	[illegible]	85	90	90	94	92	85	84	93	92	95	94
	Minimum	71	63	67	59	55	62	61	61	[illegible]	63	62	58	65	[illegible]	[illegible]	68	57	58	58	63	63	64	65	61	68	71	72	70	69
Hollister	Maximum	102	[illegible]	[illegible]	90	88	98	[illegible]	94	92	[illegible]	88	88	[illegible]	98	84	82	86	90	80	84	[illegible]	92	96	82	88	92	94	94	94
	Minimum	[illegible]	[illegible]	68	58	64	68	70	72	74	[illegible]	78	68	[illegible]	78	68	60	62	60	68	64	66	64	[illegible]	62	64	69	68	70	72
Ironton §§	Maximum	97	87	84	84	89	88	92	93	92	85	91	83	91	76	81	83	84	87	82	87	87	[illegible]	89	85	87	90	90	93	91
	Minimum	64	65	51	43	53	58	62	61	65	63	56	50	58	66	66	60	57	55	60	59	62	61	66	67	69	72	70	65	67
Koshkonong	Maximum	98	87	84	85	89	87	96	97	94	90	93	88	93	94	77	83	84	87	77	84	86	90	93	82	87	88	92	93	91
	Minimum	71	66	65	55	[illegible]	66	68	70	70	67	64	63	65	70	65	62	61	62	64	67	66	67	68	65	70	70	71	72	70
Lebanon §§	Maximum	94	86	84	87	90	94	96	97	95	92	95	90	96	79	96	81	84	90	85	88	91	93	92	80	83	89	93	94	94
	Minimum	71	59	54	55	59	61	61	62	69	58	58	56	58	66	65	58	55	56	61	65	64	67	66	66	66	70	74	73	72
Mountain Grove §§	Maximum	[illegible]	85	81	85	88	89	[illegible]	93	[illegible]	87	92	87	95	87	81	80	82	87	77	86	88	90	[illegible]	74	82	89	85	89	88
	Minimum	[illegible]	65	56	55	58	61	65	65	67	61	65	55	57	61	61	59	56	59	63	62	64	67	67	64	63	68	69	69	69
Neosho	Maximum	[illegible]	89	85	85	88	95	96	97	96	89	96	88	95	94	85	82	84	88	86	85	89	89	93	90	87	90	95	93	91
	Minimum	[illegible]	63	51	56	58	58	66	66	70	61	58	52	65	70	65	58	56	57	64	62	63	67	67	67	67	71	68	70	69
Rolla §§	Maximum	[illegible]	87	82	88	93	95	94	90	90	91	95	90	96	81	86	83	85	92	87	93	90	95	92	84	85	91	93	98	93
	Minimum	[illegible]	62	60	51	55	60	65	68	69	62	62	61	62	66	65	60	58	59	59	63	64	66	67	65	66	70	73	70	72
Springfield	Maximum	[illegible]	[illegible]	81	82	86	91	94	92	91	88	90	85	92	83	80	78	82	84	77	83	84	86	88	75	82	88	88	89	88
	Minimum	[illegible]	60	63	60	65	66	70	71	69	65	67	61	67	68	62	59	60	64	65	64	66	70	66	66	69	73	73	74	75
Southwest Plain.																														
Amoret	Maximum	98	85	84	82	90	91	90	100	91	91	91	97	95	70	75	81	90	89	85	86	79	78	98	92	85	89	95	90	92
	Minimum	73	[illegible]	[illegible]	[illegible]	60	64	61	84	68	64	64	68	62	62	58	55	61	59	59	64	65	64	67	63	68	69	72	71	72
Appleton City	Maximum	96	90	86	88	93	97	97	95	94	92	94	92	96	88	88	84	86	89	89	96	92	88	97	89	86	91	93	95	94
	Minimum	72	65	59	58	[illegible]	66	65	71	69	64	64	66	66	64	65	61	56	59	65	65	66	69	67	67	69	73	71	72	73
Clinton	Maximum	92	92	87	90	[illegible]	98	100	98	99	96	96	95	97	85	92	85	90	92	92	94	95	93	98	92	90	95	97	99	98
	Minimum	[illegible]	60	55	68	60	70	69	72	69	63	63	60	69	65	68	60	58	60	62	64	65	69	62	69	69	73	72	73	73
Harrisonville §§	Maximum	86	88	85	84	93	96	97	90	95	91	92	94	95	82	91	83	86	90	91	94	95	95	97	91	90	95	100	101	102
	Minimum	76	60	55	56	62	64	63	72	68	63	64	59	65	64	59	58	55	56	61	65	67	71	68	68	68	70	72	73	75
Lamar §§	Maximum	97	[illegible]	92	96	93	98	100	97	94	91	95	92	99	82	85	85	86	88	87	89	92	92	96	90	89	92	94	96	95
	Minimum	77	62	60	59	61	[illegible]	68	68	70	63	63	59	67	69	65	58	58	59	65	64	66	69	68	67	60	72	70	71	72
Lamonte	Maximum	85	87	82	83	90	95	95	93	94	90	91	90	93	83	89	84	84	89	90	90	93	89	95	92	89	95	100	100	98
	Minimum	68	52	51	53	57	[illegible]	58	68	65	55	55	58	65	65	59	59	55	56	60	65	67	70	68	66	69	72	74	76	75
Marshall	Maximum	90	87	81	81	88	92	92	91	93	88	....	92	92	84	[illegible]	83	89	....	....	91	95	[illegible]	96	93	88	97	101	101	99
	Minimum	70	62	51	52	58	66	62	68	68	60	....	56	66	62	57	57	58	....	....	59	65	74	63	62	65	73	73	75	74
Warrensburg	Maximum	98	90	[illegible]	92	90	97	92	94	96	95	99	100	78	84	86	86	85	90	94	86	98	88	90	92	96	96	101	101	101
	Minimum	68	70	66	67	66	66	62	63	64	64	66	70	62	58	54	55	57	61	62	64	62	64	66	62	66	70	73	74	74
Warsaw	Maximum	97	89	81	88	93	97	97	96	96	92	96	88	89	85	90	84	92	93	91	93	95	90	97	96	92	98	98	99	96
	Minimum	80	53	51	50	55	70	58	67	67	67	55	52	67	68	63	60	55	55	62	62	63	67	67	67	65	74	73	70	74
Northwest Plateau.																														
Chillicothe §§	Maximum	81	85	80	82	86	92	91	88	90	86	88	89	93	86	88	82	85	88	89	91	93	88	92	90	87	96	98	100	100
	Minimum	71	54	50	51	54	61	61	68	65	57	59	53	65	64	57	63	52	57	58	65	65	70	64	67	67	72	72	73	74
Grant City	Maximum	84	85	78	82	87	89	90	93	88	88	89	94	92	83	87	82	82	85	91	95	95	92	86	88	88	95	98	102	102
	Minimum	69	58	52	56	63	61	62	63	68	61	64	58	65	62	58	57	56	60	64	65	66	65	65	64	68	69	73	74	74
Kansas City	Maximum	86	86	81	84	91	92	93	90	92	87	87	91	90	82	86	79	83	86	89	89	92	94	95	88	87	97	98	99	99
	Minimum	72	66	61	63	68	69	71	73	70	67	72	63	71	61	67	62	60	69	66	67	71	72	72	69	70	74	78	77	78
Kidder §§	Maximum	82	81	84	82	89	89	90	88	90	88	87	89	88	83	87	82	82	87	90	93	97	89	90	89	87	97	100	100	100
	Minimum	71	59	53	57	63	68	70	71	69	60	69	58	65	54	63	57	51	66	60	65	67	74	68	69	68	74	71	71	71
Lexington §§	Maximum	[illegible]	88	85	84	92	95	95	94	91	90	92	90	90	82	90	85	85	90	93	91	93	90	97	90	90	96	99	100	100
	Minimum	76	60	55	58	61	69	63	70	68	70	68	61	[illegible]	65	62	58	57	58	60	67	69	73	70	69	68	72	74	75	77
Maryville §§	Maximum	85	84	81	83	86	92	90	90	90	90	83	91	89	81	86	81	85	89	92	95	94	97	92	89	89	98	102	101	102
	Minimum	67	55	51	55	62	60	61	66	66	59	62	61	61	62	59	55	55	56	59	60	66	68	68	66	67	67	67	70	75
Oregon	Maximum	87	82	80	80	[illegible]	90	87	81	89	87	84	88	86	82	81	80	83	84	89	90	91	93	91	86	87	93	97	98	99
	Minimum	64	57	51	58	61	64	66	70	67	60	69	57	63	60	58	55	56	60	61	67	68	69	67	66	67	72	73	75	76
St. Joseph	Maximum	87	86	81	84	91	92	90	87	92	89	85	92	89	82	86	82	85	89	93	93	91	96	94	91	90	97	102	101	101
	Minimum	68	[illegible]	56	59	67	69	68	73	69	[illegible]	69	62	67	64	61	66	58	60	62	69	71	75	70	69	70	75	77	79	79
Trenton	Maximum	93	80	[illegible]	81	84	85	88	90	85	84	83	86	90	81	84	78	83	85	88	90	90	89	88	89	87	94	94	96	97
	Minimum	70	59	[illegible]	57	61	66	69	70	67	61	64	60	69	61	61	58	57	61	62	67	69	62	70	71	70	73	76	75	77

[illegible], etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read the preceding day, on which it almost always occurs.


NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR JULY, 1917, AT THE UNIVERSITY OF M COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 51 and 52.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau st
described in Circular L. Horizontal distance of the anemom
pan, 2 inches. Height of cups of anemometer above rim
inches. The instrument shelter is 100 feet southeast of the p
of thermometers above ground, 11 feet. Distance of rain gage
2.6 feet. The ground in the immediate vicinity of the pan sl
north, average 5 per cent grade. The soil is covered by blue
being part of the University campus. There are no bodies of w
nor are there any irrigation projects under way nearby. Tl
topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervisi
being George Reeder, Meteorologist and Section Director. Th
tions in the table herewith, were taken by Philip G. McGinnis
observer, Weather Bureau. This is one of the "Class A" st
signed to furnish practical information relative to evaporation.
complete climatic records have been made at Columbia, Mo
Weather Bureau for about 28 years. These records are publish
are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for July, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Daily evaporation	.264	.128	.291	.241	.202	.248	.237	.257	.151	.283	.252	.299	.254	.032	.078	.196	.245	.201	.231	.253	.253	.246	.198	.227	.221	.139	.248	.314	.322
Daily wind movement	35	17	31	23	17	30	24	23	20	28	23	47	34	28	14	19	36	16	15	25	21	21	19	27	29	28	31	29	32

*Total in next following measurement. † Indicates minus (−) Observations taken a

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	4.43	+1.07	0.98	0	9	19	2	10	s.	G. V. Randolph.
Boonville	40	1.13	−3.03	0.30	0	9	29[a]	0[a]	2[a]	sw.	C. Randecker.
Cape Girardeau	10	3.22	....	1.60	0	8	21	3	7	w.	D. L. Albert.
Glencoe	0	3.62	....	1.42	0	9	20	5	6	......	Vint R. Neel.
Hermann	43	2.34	−1.63	0.92	0	8	18	8	5	s.	C. T. Maushund.
New Madrid	23	7.22	−2.87	3.05	0	10	22	3	6	sw.	Miss Josie Smith.
Osceola	17	3.30	....	0.92	0	11	24	3	4	......	Wm. E. Mathews.
Pacific	0	1.95	....	1.03	0	5	19	5	7	......	R. C. Dougherty.
Steelville	15	3.83	+0.57	1.47	0	6	20	0	11	s.	Wm. J Drennen.
Tuscumbia	0	1.60	....	0.45	0	10	20	5	6	s.	C. B. Wright.
Union	0	2.85	....	1.25	0	9	17	9	5	sw.	J. Wm. Keller.
Valley Park	0	2.61	....	1.23	0	9	23	2	6	s.	H. J. Lucksinger.
Waverly	2	0.71	....	0.22		7	24	3	4	sw.	J. W. Cauthorn.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

AUGUST, 1917

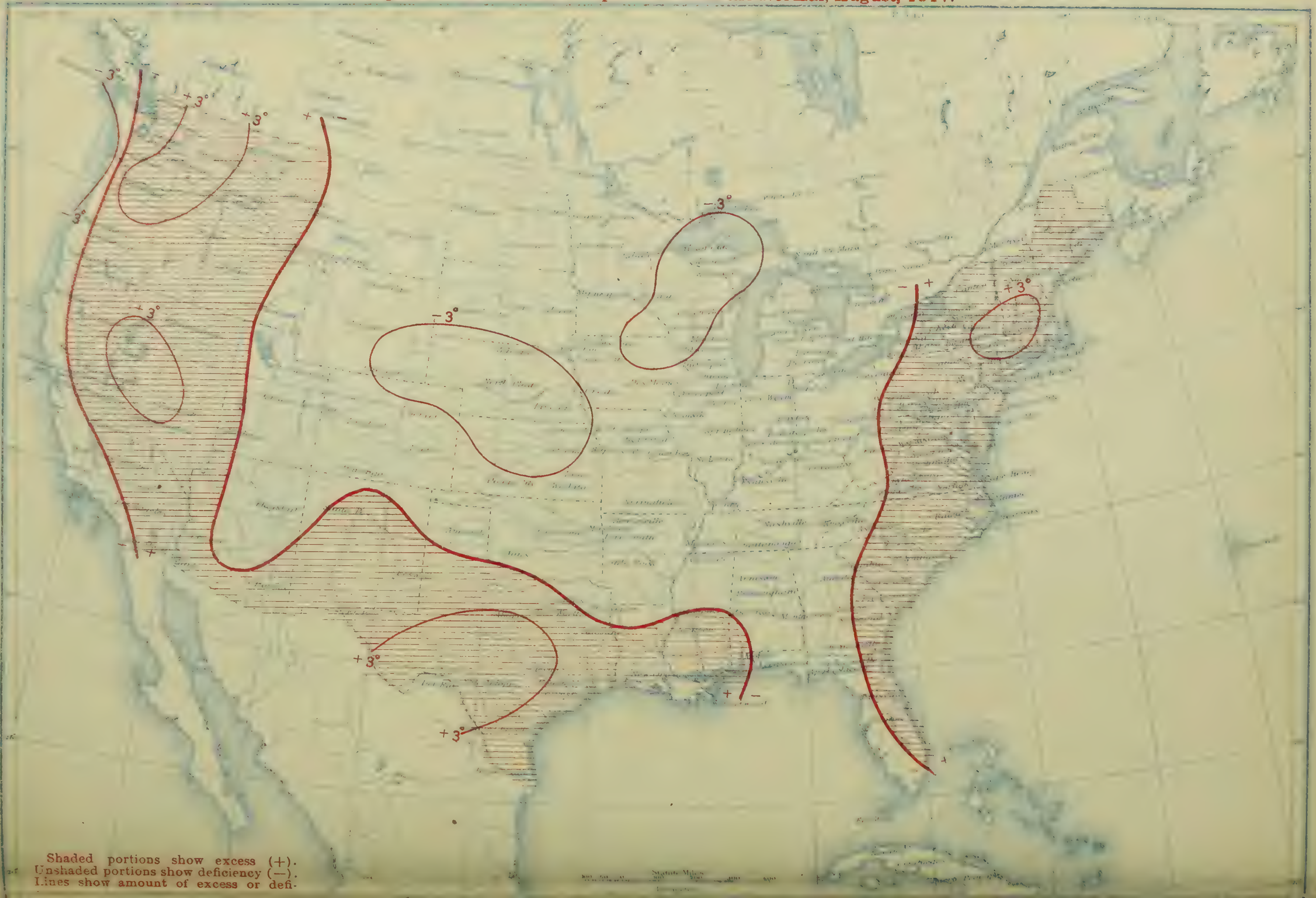
BY

GEORGE REEDER

METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
SEPTEMBER 20, 1917.

Departure of the Mean Temperature from the Normal, August, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or defi-

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XI. COLUMBIA, MO., AUGUST, 1917. No. 8.

GENERAL SUMMARY.

weather of August, 1917, was generally favorable for out- ok and maturing crops. From a physiological viewpoint a very pleasant month. As compared with other years e August, (1916), has been cooler during 29 years, several have been almost as pleasant.

matured satisfactorily, and at the close of the month ook for a large yield was promising. There was a small of wheat, rye and oats yet to thrash. The potato crop d to excellent. Pastures were good in most sections, se in some of central and northeast counties, damaged ght during the latter part of July, had regained almost aining value by the end of August. Stock were fat, with ss and water plentiful. A fine crop of wild hay was ed seed clover was harvested in good condition. Alfalfa eptionally fine. The apple crop outlook was good. Fall progressed with soil in fine condition.

was about the usual number of thunderstorms, a few companied by high wind and hail, but the damage was d of little or no importance.

TEMPERATURE.

onthly mean for the State, as determined from the rec- 73 stations, was 73.3°. The departure from the normal ations having 10 or more years' record was minus 2.9°. month in 1916 was nearly 6° warmer, while August, as 3.5° cooler than the present month. Temperatures e first five days were above normal and from about the the 20th the weather was warmer than the average, but of the month was cooler than normal, the last four days rkedly cool. The 1st and 4th were the warmest days, s reporting 100° or higher, five in the Southwest, four east and Northwest, two in Southeast, and one in the Plateau. The 25th was the coolest day generally, though imum for the month, 38°, occurred on the 10th, at ille. The average number of days with temperature was 8. In the extreme Southeast, however, the Ca- le station experienced 28 days with temperature 90° r, while Cardwell, in an adjoining county, had 23 days or higher.

PRECIPITATION.

verage precipitation, 88 stations reporting, was 4.45 The departure from the normal for 73 stations having re years' record was plus 0.94 inch. The precipitation onth was, as a rule, well distributed. It was heavier mal in the southeastern lowlands, Ozark Plateau, and stern plain, but there was a small deficiency in the sec- th of the Missouri River, except in about five counties thwestern plateau, and in the lower part of the Mis- ver section from Howard County to St. Charles County, orth to Pike County. The greatest monthly precipita- 11.46 inches, at Jackson, and the next greatest was es, at Goodland. The least monthly amount was 0.98 Palmyra. The greatest amount in any 24 consecutive s 5.20 inches, at Jackson on the 15th; the next great- 3.70 inches, at Birchtree on the 16th.

verage number of days with 0.01 inch or more precipi- as 9.

EVAPORATION.

tal evaporation for the month, at Columbia, Mo., was es; the total rainfall was 5.27 inches; the total wind nt over the surface of the pan was 840 miles, and the mperature, 72°. During the same month in 1916, these re, in order named, 6.54 inches; 2.09 inches; 798 nd 79°.

WIND.

The prevailing winds were from the south. The average wind movement for the State, 8 stations reporting, was 5,132 miles, and the average hourly velocity, 6.9 miles. Wind squalls of over 40 miles an hour occurred on the 8th, 20th and 27th, the highest being 62 miles, at Kansas City on the 8th.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 305. This is about 71 per cent of the possible, and about normal for August.

MISCELLANEOUS PHENOMENA.

Aurora—25th.

Fog, dense—13th, 16th, 21st, 22d and 28th.

Hail—3rd and 8th.

Halo, solar—5th, 12th, 14th and 29th. Lunar—1st, 2d, 28th and 31st.

Thunderstorms—(more or less general), 1st, 3d, 5th, 6th, 7th, 8th, 14th, 15th, 20th, 21st, 23d, 26th, 27th, and 28th.

ERRATA FOR MAY, JUNE AND JULY, 1917.

May: Unionville, lowest temperature should be 29° on the 5th. June: Oregon, number of days with 0.01 inch or more precipitation should be 6. Poplar Bluff, mean minimum temperature should be 59.9°, and monthly mean, 72.4°. July: Poplar Bluff, mean maximum temperature should be 88.6°; mean minimum, 65.5°, and monthly mean, 77.0°.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.09	87	......	322	76	4,057	5.5	26	nw.	24
Hannibal	30.04	82	......	......	......	4,875	6.6	42	sw.	20
Kansas City	30.00	76	55	296	70	6,406	8.6	62	nw.	8
St. Joseph	30.00	84	57	341	81	4,295	5.8	28	nw.	23
St. Louis	30.00	76	63	289	68	7,142	9.6	41	s.	27
Springfield	30.02	85	65	248	59	5,790	7.8	32	ne.	9
Cairo, Ill	29.99	85	68	......	......	4,286	5.8	24	n.	1
Keokuk, Iowa	30.01	82	58	314	74	4,205	5.6	28	w.	24

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	74.0	−1.6	110	48	7.25	+3.80	......	0.0	11	....	....	....
1889	73.5	−2.1	101	52	1.96	−1.49	......	0.0	14	....	....	....
1890	73.3	−2.3	101	49	4.84	+1.39	......	0.0	9	....	....	....
1891	73.2	−2.4	108	58	5.54	+2.09	......	0.0	8	....	....	....
1892	74.3	−1.3	100	40	2.42	−1.03	4.50	0.0	6	17	8	6
1893	72.8	−2.8	100	40	2.20	−1.25	5.60	0.0	4	18	10	3
1894	77.0	+1.4	111	39	1.58	−1.87	3.07	0.0	5	14	16	1
1895	75.3	−0.3	104	48	4.23	+0.78	3.50	0.0	8	15	11	5
1896	76.6	+1.0	108	41	3.25	−0.20	1.80	0.0	6	17	10	4
1897	74.1	−1.5	108	41	2.39	−1.06	6.88	0.0	6	19	9	3
1898	75.8	+0.2	103	44	3.03	−0.42	5.00	0.0	5	17	10	4
1899	78.8	+3.2	107	49	3.35	−0.10	4.75	0.0	7	18	10	3
1900	80.3	+4.7	105	52	3.51	+0.06	4.28	0.0	6	19	9	3
1901	78.4	+2.8	109	47	1.88	−1.57	2.77	0.0	5	19	9	3
1902	75.0	−0.6	103	47	6.16	+2.71	4.33	0.0	10	14	11	6
1903	74.4	−1.2	102	43	5.40	+1.95	7.84	0.0	10	16	11	4
1904	73.7	−1.9	100	43	5.46	+2.01	6.10	0.0	8	16	10	5
1905	76.4	+0.8	102	48	4.69	+1.24	4.43	0.0	8	19	7	5
1906	76.6	+1.0	101	40	4.72	+1.27	3.94	0.0	11	14	10	7
1907	77.3	+1.7	109	47	3.71	+0.26	3.55	0.0	9	17	8	6
1908	76.4	+0.8	102	46	3.87	+0.42	6.30	0.0	8	17	9	5
1909	79.5	+3.9	110	40	0.55	−2.90	1.00	0.0	2	24	6	1
1910	74.7	−0.9	103	40	2.77	−0.68	4.21	0.0	6	15	9	7
1911	75.4	−0.2	109	41	4.20	+0.55	5.17	0.0	7	15	8	8
1912	76.2	+0.6	104	41	4.19	+0.71	2.62	0.0	9	17	8	6
1913	82.8	+6.9	110	41	1.06	−2.51	3.51	0.0	3	22	7	2
1914	78.0	+1.8	106	49	4.25	+0.60	5.50	0.0	9	15	9	7
1915	69.8	−6.5	98	37	7.86	+4.15	8.20	0.0	12	12	9	10
1916	79.2	+2.9	107	41	4.05	+0.49	6.18	0.0	7	19	7	5
1917	73.3	−2.9	104	38	4.45	+0.94	5.20	0.0	9	16	8	7

Climatological data for August, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observe
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	36	73.2	−0.2	97	3	53	10†	31	2.89	−1.03	0.83	0	10	12^{a}	3^{a}	15^{a}	e.	Louis Benecke.
Clifton Hill	Randolph	731	....	73.6	−2.3	101	3	48	29	41	2.04	−0 80	0.77	0	8	20	7	4	......	L. S. Harlan.
Columbia	Boone	784	26	72.3	−2.4	97	3	51	10	32	5.27	+2.23	1.84	0	11	12	8	11	se.	U. S. Weather B
Fayette	Howard	725	31	71.6^{d}	−4.6	......	......	52	30	....	4.07	+1.01	1.09	0	10	....	....	....	......	Prof. T. B. Smit
Fulton	Callaway	818	12	72.0	−4.3	99	3	48	30†	35	4.27	+0.97	1.05	0	12	18	5	8	ne.	Dr. O. M. Weigl
Gorin	Scotland	700	27	......	......	......	......	......	......	....	1.44	−1.43	0.63	0	9	13	8	10	sw.	J. W. Pulliam.
Hannibal	Marion	534	23	72.1	−2.9	95	4	50	30	32	1.87	−1.51	0.79	0	10	13	9	9	sw.	U. S. Weather B
Jefferson City	Cole	557	30	73.5	−3.2	100	3	51	30	34	4.16	+1.27	1.65	0	13	21	4	6	s.	Miss Emma Swi
Keytesville	Chariton	660	3	......	......	......	......	......	......	....	3.11	......	0.78	0	9	....	....	....	......	J. T. Dewey, M.
Kirksville	Adair	969	24	71.8	−2.0	95	4	48	10	35	1.46	−1.79	0.60	0	7	15	16	0	w.	Prof. Mark Bur
Louisiana	Pike	469	38	72.4	−2.3	96	1	47	30†	36	4.01	+0.73	1.75	0	9	20	8	3	w.	J. T. Farrell.
Macon	Macon	875	18	72.3	−4 4	98	4	51	10†	35	1.34	−1.44	0.98	0	6	15	6	10	nw.	John A. Cook.
Mexico	Audrain	797	38	73.0	−3.1	100	3	49	30	39	4 69	+1.68	1 65	0	6	15	16	0	s.	R. M. Llewellyn
Oakfield	Franklin	793	35	74.0	−2.8	97	1	51	30	33	6.41	+2.79	2.81	0	11	8	17	6	n.	E. E. Steines.
Palmyra	Marion	652	4	72 2	−4.5	98	4	47	30	36	0.98	−2.37	0.61	0	8	19	3	9	sw.	W. B. Markell.
St. Catherine	Linn	850	3	72.2	......	94	3	50	10	34	2.87	......	1.08	0	9	13	16	2	sw.	L. D. Baker.
St. Charles	St. Charles	456	38	74.6	−1.9	96	4	51	30	31	5.29	+2.07	2.19	0	7	10	13	8	s	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	75.3	−1.9	94	5	58	29	25	1.99	−0.67	0.70	0	10	9	18	4	s.	U. S. Weather B
St. Louis (2)	.....do	578	4	74.7	......	93	5	56	30	26	2.41	......	0.94	0	11	11	12	8	n.	St. Louis Univer
Shelbina	Shelby	779	24	......	......	......	......	......	......	....	1.34	−1.30	0.50	0	4	....	....	....	......	S. G Parsons.
Steffenville	Lewis	650	23	70.8	−5.7	104	3	38	10	56	1.00	−2.47	0.40	0	4	11	18	2	w.	Frank Hall.
Unionville	Putnam	1,072	23	70.7	−4.6	97	4	45	29	38	3.01	−0.78	1.50	0	9	19	9	3	nw.	Geo. W. Davis.
Warrenton	Warren	865	25	73.8	−2.6	99	3	53	26†	37	3.51	+0.42	0.76	0	9	14	8	9	n.	Prof. J. H. Frick
Keokuk, Iowa	......	......	....	72.3	−2.7	93	4	52	25	32	1.37	−1.64	0.59	0	6	15	13	3	sw.	U. S. Weather B
Section means and extremes		......	....	72.8	−3.1	104	3	38	10	56	2.95	−0.19	2.81	0	9	15	10	6	sw.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	78.0	......	103	6†	50	26	43	1.49	......	0.70	0	5	15	12	4	......	J. M. Seaborn.
Caruthersville	Pemiscott	220	25	80.6	+1.5	104	1†	56	26	39	5.34	+1.92	1.58	0	7	22	5	4	e.	H. E. Averill.
Doniphan	Ripley	344	11	74.9	−2.2	96	1	51	30	33	6.66	+2.91	2.13	0	8	21	3	7	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	74.6	−1.4	99	1	49	11	35	11.46	+8.40	5.20	0	7	17	2	12	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	74.4	−2.3	96	5	50	11†	33	6.33	+3.38	2.20	0	7	16	10	5	w.	Dr. A. F. Hendri
Patton (near)	Bollinger	500	1	......	......	......	......	......	......	....	4 48	......	2.00	0	5	19	0	12	s.	George F. Ellis.
Poplar Bluff	Butler	339	12	73.1	−5.0	94	1	50	26†	35	5.54	+2.37	1.92	0	10	16	8	7	......	Miss Belle Kinne
Sikeston	Scott	328	15	78.7	+1.4	94	4†	58	11	28	4.40	+1.03	1.74	0	6	26	5	0	s.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	76.1	−0.9	94	1	58	30	22	6.36	+3.43	3.23	0	8	10	15	6	s.	U. S. Weather B
Section means and extremes		......	....	76.3	−1.3	104	1†	49	11	43	5.78	+3.35	5.20	0	7	18	7	6	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	72.9	−3.0	93	1	48	30	30	8.15	+3.69	3.70	0	7	21	7	3	s.	V. H. Kirkendal
Bolivar	Polk	1,071	28	69.8	−7.3	86	3	45	30	28	4.35	+0.76	1.30	0	13	18	11	2	se.	A. C. Fink.
Cassville	Barry	1,500	5	72.4	......	90	1†	45	30	33	4.64	+0.71	1.65	0	6	21	6	4	s.	Mrs. Zuma Bloo
Crocker	Pulaski	1,126	5	75.0	−1.3	97	2	47	29	34	7.55	+4.21	3.00	0	5	21	7	3	ne.	Roy W. Reed.
Dean	McDonald	1,000	17	73.0	−4.5	93	1†	45	30	36	5.55	+1.51	1.21	0	11	20	2	9	sw.	H. E. Dean.
Eldon	Miller	934	15	72.0	−4.5	97	3	48	30	36	4.50	+0.44	1.05	0	14	8	14	9	nw.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	73.0	......	94	1	50	30	30	5.33	+1.48	1.71	0	9	21	6	4	n.	R. C. Walton.
Gano	Dent	1,250	12	71.9	−4.5	96	1	48	30	34	8.08	+3.61	2.13	0	10	18	10	3	s.	A. C. Leach.
Goodland	Iron	1,000	11	71.7	−2.8	100	1	44	30	38	7.20	+3.56	2.65	0	9	10	18	3	s.	F. M. Adams.
Hollister	Taney	735	7	75.2	−2.5	98	5	56	12†	32	3.85	−0.46	1.55	0	5	18	0	13	se.	W. P. Chapmann
Houston	Texas	1,280	23	72.0	−5.1	91	1	44	30	32	3.27	−0.27	0.75	0	8	19	8	4	se.	R. F. Harmon.
Ironton	Iron	925	38	71.5	−3.0	94	1	44	11†	37	5.23	+1.64	2.15	0	9	10	13	8	ne.	W. H. Delano.
Koshkonong	Oregon	958	15	74.3	−3.3	94	2†	50	30	31	7.02	+3.29	1.42	0	9	21	6	4	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	71.9	−4.5	94	1	47	30	33	7.06	+3.79	1.48	0	11	21	2	8	s.	Leonard E. Dicke
Lockwood	Dade	1,078	21	73.4	−3.5	91	3†	40	30	35	5.45	+1.16	1.53	0	9	18	6	7	se.	C. S. Crow.
Mountain Grove	Wright	1,490	17	71.5	−3.5	92	1†	45	30	36	6.06	+1.57	1.47	0	10	13	12	6	sw.	Mo. Fruit Exp. St
Mount Vernon	Lawrence	1,480	37	73.0	−4.0	94	1	40	29	32	......	......	......	......	....	....	....	....	......	C. L. White.
Neosho	Newton	1,011	33	73.4	−3.4	93	5	43	30	44	6.70	+2.57	1.97	0	12	20	3	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	34	73.7	−1.7	94	2†	51	25†	34	5.68	+1.96	1.80	0	10	14	12	5	w.	Prof. Elmo G. Ha
Springfield	Greene	1,350	28	72.8	−2.0	90	5	53	30	24	4.26	−0.05	1.10	0	10	15	9	7	s	U. S. Weather Bur
Section means and extremes		......	....	72.8	−3.6	100	1	40	29	44	5.79	+1.85	3.70	0	9	17	8	6	s.	
Southwest Plain.																				
Amoret	Bates	831	7	72.8	−3.5	98	4†	48	29	34	6.49	+2.95	2.30	0	10	11	9	11	sw.	Darby Fruit Far
Appleton City	St. Clair	853	25	75.8^{h}	−1.8	96	3†	54	10	37	......	......	2.54	0	....	9^{i}	10^{i}	3^{i}	......	W. G. Bigelow.
Clinton	Henry	765	29	71.0	−5.7	100	2†	51	30	35	6.09	+2.79	1.78	0	11	11	14	6	nw.	A. E. Derwent, M
Harrisonville	Cass	912	43	73.2	−2.4	102	3	50	29†	36	5.66	+1.59	1.75	0	13	10	2	19	n.	A. J. Sharp.
Lamar	Barton	980	35	75.2	−2.1	98	2†	49	30	41	1.49	−2.80	0.70	0	5	12	4	15	s.	Joe W. Springer.
Lamonte	Pettis	863	27	72.2	−4.3	99	3	46	30	39	4.94	+1.58	1.08	0	11	15	12	4	ne.	J. Ed. Hall.
Marshall	Saline	779	25	71.4^{b}	−4.1	103	3	50	26†	39	4.26	+0.70	1.45	0	9	16^{d}	8^{d}	3^{d}	sw.	Dr. W. H. Black.
Nevada	Vernon	860	22	73.8	−3.0	95	3†	49	30	30	4.47	+0.99	1.27	0	8	20	8	2	nw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	74.8	−2.2	101	2	52	10†	34	4.22	+0.69	1.87	0	9	11	15	5	nw.	Geo. H. Collins.
Warsaw	Benton	715	11	75.2	−2.2	102	3	46	30	45	6.38	+2.40	1.35	0	11	11	16	4	se.	J. R. Smith, M. D.
Section means and extremes		......	....	73.5	−3.0	103	3	46	30	45	4.90	+1.21	2.54	0	10	13	10	8	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	74.6	−2.0	100	3	54	10	32	2.85	−0.73	1.15	0	7	21	8	2	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	71.9	−2.8	99	4	45	10†	43	3.37	−0.59	0.80	0	11	13	13	5	nw.	M. H. Moulton.
Chillicothe	Livingston	768	....	76.0	+0.1	98	3†	57	10†	29	3.04	......	1.50	0	9	20	0	11	nw.	Dr. J. R. Campbe
Conception	Nodaway	982	31	72.4	−1.7	100	4	51	28	34	1.89	−1.75	0.73	0	8	15	15	1	nw.	Fr. Adelhelm Hes
Gallatin	Daviess	803	16	......	......	......	......	......	......	....	4.51	+0.31	2.27	0	13	19	7	5	nw.	Robert R. Wynne.
Grant City	Worth	1,134	23	72.2	−2.8	98	4	50	29	34	3.29	−0.29	1.42	0	8	23	4	4	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	73.6	−2.2	98	3	55	29	27	3.27	−1.48	1 09	0	10	16	11	4	n.	U. S. Weather Bur
Kidder	Caldwell	1,020	25	72.8	−2.7	99	4	52	25†	32	5.68	+1.78	2.60	0	13	21	4	6	sw.	J. F. Sharp.
Lexington	Lafayette	688	34	73.8	−2.0	100	3	50	29	35	2.83	−0.40	0.97	0	9	13	0	18	s.	J. W. Keithley.
Liberty	Clay	864	27	78.5^{a}	+1.9	102	4	52	25†	35	3.52	−0.39	0.83	0	10	17^{a}	10^{a}	3^{a}	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	70.5	−3.2	97	4	48	10	36	3.26	−0.77	0.72	0	11	18	5	8	s.	J. R. Brink.
Oregon	Holt	1,048	60	70.0	−5.1	93	4	49	10	29	3.91	−0.18	1.00	0	13	13	13	5	se.	Tom Curry.
St Joseph	Buchanan	967	44	72 8	......	98	4	51	29	30	5.08	+1.43	2.36	0	14	15	12	4	e.	U. S. Weather Bur
Tarkio	Atchison	976	4	71.2	−4.7	98	4	46	29	36	2.41	−1.71	0.84	0	9	20	6	5	sw.	John F. Frazier.
Trenton	Grundy	822	21	71.9	−3.2	96	1	50	29	30	4.36	+0.83	1.99	0	10	22	5	4	se.	W. H. Estes.
Section means and extremes		......	....	73.0	−2.3	102	4	45	10†	43	3.55	−0.27	2 60	0	10	18	7	6	nw.	
State means and extremes		......	....	73 3	−2.9	104	1†	38	10	56	4.45	+0.94	5.20	0	9	16	8	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete rep used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for August, 1917.

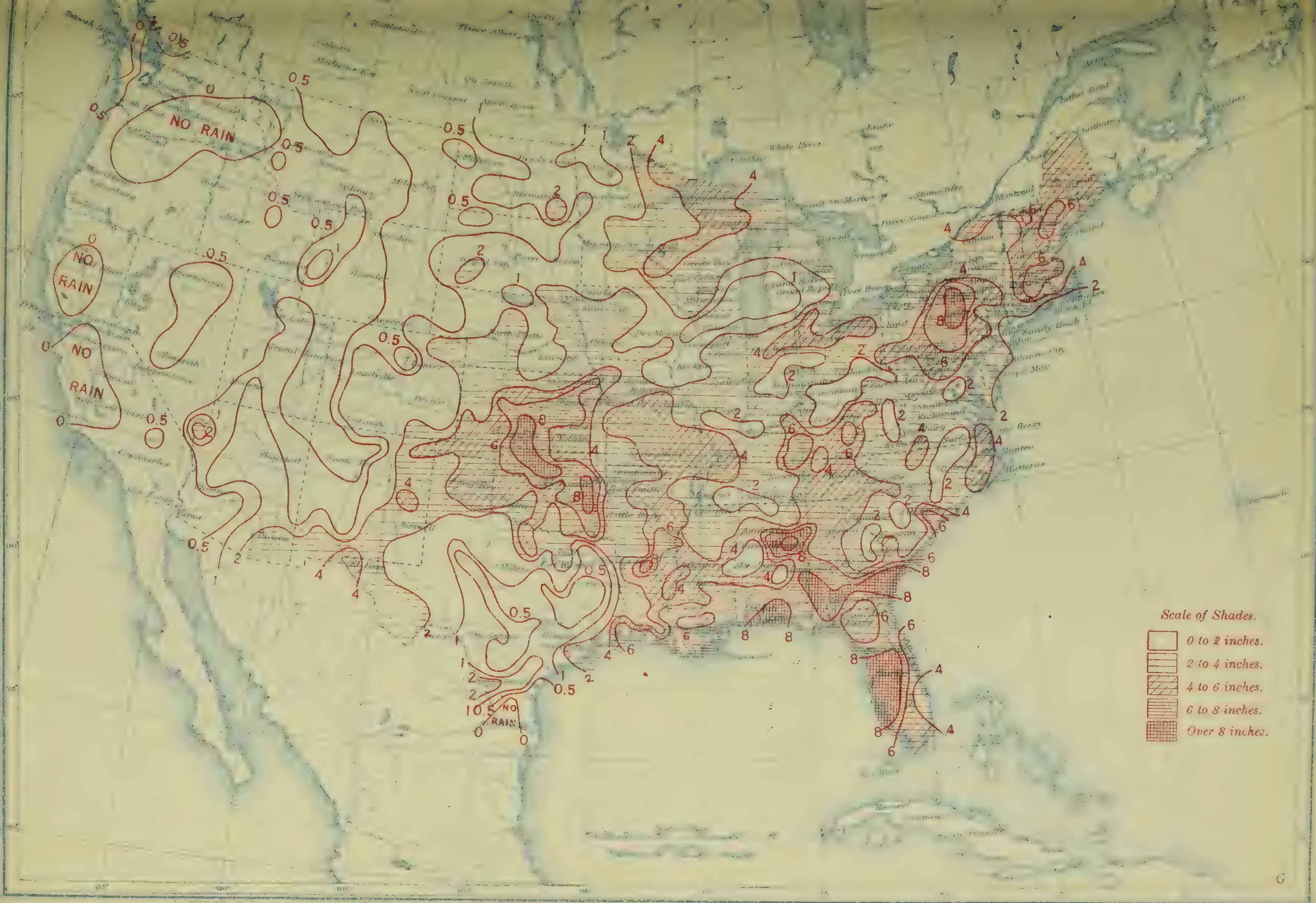
Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
theast Plain.																																	
lle ‡	Missouri				1.78		.06	1.62		T.						.77	.08				.14	.69	T.	.15				.03	.14	.04			5.50
ick. ‡	Grand	.03			.07		.17	.72	.03							.83	.35					.12		.48					.09				2.89
Hill ‖ ‖	Chariton	.03					.43	.77							.20	.48					.08			.02				.03					2.04
ona***	Missouri	T.		.62			.47	.96							.53	1.35					.35	.49		.01			.07	.01	.41				5.27
	do			.65			.65	.77							.47	1.09					.07			.12			.07	.07	.11				4.07
	do	.02		.52	.03		.44	.16							.43	1.03	T.				1.05	.11		.01			T.	.01	.46				4.27
e ‡	Meramec		T.		.03			28								.85	.18					2.46	.78						.59	.40	.09		5.66
	Mississippi	.01				.10	.06	.63					.14							.08	.08			.01				.33					1 44
al***	do	T.				.08	.24	.56		.08					.03						.34	.24	T.				.04	.14	.12				1.87
un ‡	Missouri		.02		.09		.48	.14	T.							1.22	.20					.20	.28	T.				.06	.38	.10			3.17
n City ‖ ‡	do		12		.17		.57	.15	.02							1.45	.20				.03	.40	.04	.01				.15	.82	.03			4.16
ville	Chariton	.02					.45	.60							.30	.78					.47				.44			.02	.03				3.11
ille	Mississippi	.16					.13	.60					.08								T.	.12		.19				T.	.18				1.46
na	do			1.75			.43	.35		.20					.09						.61	.24						.12	.22				4.01
‡	Chariton						.02	.98								.13	.01					T.	T.	.04				T.	.16				1.34
	Mississippi			1.65			.32	1.20									.85					.12		T.				T.	.55	T.			4.69
d	Meramec	.02		.23			.61								.27	1.29	.02				.18	2.63					T.	.04	.30	.82			6.41
‡	do		T.		.11		.08									1.45	.30					2.40	.15					T.	.82	.35			5 66
n ‡	Mississippi						.01	.61		.06						.01						.02	.17				.02		.08				0 98
erne	Grand	.13					.27	1.08		.03			.07		.08	T.					.70	.28		.05				T.	.18				2.87
eles	Missouri			T.			.50	.18							.10	.22					2.19	1.62						T.	T.	.48			5.29
is (1)***	Mississippi	T.		.03		.32	.24								.06	.04	T.				.24	.46					T.	.05	.24	.31			1.99
is (2)	do	T.		.05		.55	.14								.07	.07	.01				.50	.44	T.				T.	.05	.18	.35			2.41
a	do						.20	.50													.31							.33					1.34
ville	do					T.	.15	.40		.15			T.		T.									T.				T.	.30				1.00
	Meramec		.06		.30			2.00								1.20	.12					1.75	.40						.06	.50	.13		6.52
lle ‖	Grand	.15		T.			.20	1.30		.14			.06	T.		T					.40	.44		.10					.22				3.01
Park ‡ ‖	Meramec		.02		.04		T.	.14								.35	.26					2.00	.31					T.	.35	.31	.17		3.95
ton ‡	Mississippi		T.		.50		.12	.66	T.							.62	.20					.76						.03	.55	.02			3.51
, Iowa	Mississippi	T.				.08	.16	.30		.24			T.								T.	T.						.57	.02				1.37
ast Lowlands.																																	
rardeau ‖ ‖	Mississippi																																......
ll	do						.70						T.		.17	.09	.47				.06		T.						T.				1.49
rsville	do		T						1.34				.04	T.	.97	.09	1.14					1.58	.18	T.						T.			5.34
an	Black	T.	.40					.09		.08			.12		.88		2.13					1.30								1.66			6.66
	Mississippi	.35						1.50	.02							5.20	1.20					2.92								.27			11.46
Hill	do							.70	.98						.30	2.20	1.45					.10							.60				6.33
adrid ‡	do								1.77						.15	.16	2.50	.14				.02	.06		.10					.61	.03		5.54
(near)	do						.60								.10	2.00	1.25													.53			4.48
Bluff ‡ ‖	Black		.68						.03	.10				T.	.13	.52	1.92	.04				.04			T.					1.38	.70		5.54
n	Mississippi					.35			1.74								.97					.09	.35							.90			4.40
ll***	do	T.	.03					.70							.05	3.06	1.24					.82							.18	.28			6.36
Plateau.																																	
on ‡	Gasconade		1.10		.65			.75		.17						2.22	.12				.20	.55			T.				T	.50	.12		6.38
	Black		.28					1.70		.27					1.10		3.70				.40									.70			8.15
	Osage	.11				.80	.10			.72			.06		.10	1.30	.06			.07	.46			.04					.50	.03			4.35
e	White		.19							.60		T.	.74	.86					T.		T.	T.							1.65	.60			4.64
		2.14						.12		T.					3.00						1.50		T.						.79				7.55
	Neosho		.20							.53			.99	.02			1.21	.03		.21	1.10	.04							.87	.35			5.55
	Osage	.10		.03	.03	.12	.34	.03	.20						.94	1.05				.21	.58	.61		.05					.21				4.50
ty	Black	.22						.67	.32	.30						1.71	.60			T.	.35		.51							.65			5.33
	Meramec	.63		T.	.16		1.45	.48		.30					1.19	1.41	.08			T.	T.	.25							T.	2.13			8.08
nd	Black	.91		09						.30					.80	.86	.42				.14	2.65								1.03			7.20
r	White								.32		.48		.50				1.00													1.55			3.85
	Gasconade	.51			.10				.31	.35					.75	.44					.71	T.								.10			3.27
	Mississippi		.15				.20		.10	.15						2.15	1.30						.08							.75	.35		5.23
mong	Black				.72			1.04	1.00	.11						.70	1.34				1.42	.04								.65			7.02
n ‡	Osage		.70		.32			1.48		1.12						.69	.62			T.		1.28	.03					T.	.30	.45	.07		7.06
od	do	1.21						.47		.18						1.53	.71				.03	.13					.04		1.15				5.45
in Grove ‡	White		.31		.31					.98					.04	.16	1.47	.77				.78								1.18	.06		6.06
	do		T.				.88	.72		.14		T.	.54	.02			1.97		.04	.18	.44	.11		T.					1.45	.21			6.70
	Meramec		.89		1.80		T.	.65	T.	.15						.91	.10				.07	.26							T.	.70	.15		5 68
eld***	White	.0[illegible]			T.		T.	.28		.63			.23		.14		.75				.80	.08					T.		.89	.45			4.26
le ‡	Meramec		.33		.09			.46		.03						1.33	.15				.14	.44	2.06							.89	.10		6.02
bia ‖ ‖	Osage		.06		.03		.56			.48						1.20					.03	1.10	.06		.04				.23	.10			3.89
rest Plain.																																	
	Osage	T.					2.30	.52		1.20		T.		T.	1.56	.30					.27	.01		.05			.14		.14				6.49
n City	do	.06			.01		2.54	.39	.01	.53				T.	.90	.22					.91	.88		.11									......
	do				.40		1.78	.50	.15	.48					.72	.41				.45	.55			.47					.18				6.09
nville ‡	do	.08	.05				.38	1.75		.36					.02	1.35	.17				.25	.76		.25			.12		.12				5.66
	Neosho							.70						T.		.30	.42	.05				.02		T.					T.	T.			1.49
	Missouri	.17		.30			.72	1.02		20					.87	1.08	T			.03	T.			.05			.30		.20				4.94
	do	.06				.10	1.10	1.45							.78	.32					.21						.12	T.	.12				4.26
	Osage	.86					1.27	.46		.22					.07					1.13	.30						.16						4.47
sburg	Missouri	.16					.82	1.05		.16					.75	.67								.24			.20		.17				4.22
	Osage	T.			.20	T.	1.16	.18		1.35					1.02	.18				.18	.93	.22		.60		T.	T.		.36				6.38
‖	Missouri	.05			.84		.18	1.64		.03						.84	.17					.12		.02			T.	.05	.08				4.02
rest Plateau.																																	
	Grand						.25	.90							.25	.25					.45			.45				.30					2.85
	do	.23	.06			.14	T.	.80		.15			.05		T.				T.	T.	.60		.50	.70			T.	.09	.05				3.37
the ‖ ‖	do	.01					.40	1.50					.01			.20	.01					.01		.50					.40				3.04
ion	Missouri	.51	.03			.18		.73		.04			.22		03	T.						T.		T.				.15					1.89
	Grand	.16	.04			.30	T.	2.27		T.			.25		.07	.04	.01				.95		.04	.06			T.	.02	.30				4.51
ty	do	65	.07			.35		1.42		.17			.23						T.			.10						.30					3.29
ity***	Missouri	.05	T.			04	.78	.31	.43				T.		.81	.37					.18			T.			.12	.18					3.27
	Grand	.25		.05			.05	2 60		.02			.22			.16	.15				.78	.89					.02	.01	.48				5.68
on ‡	Missouri						.12	.97		.17						.86	.18					.27		.04			.14		.08				2.83
	do	T.	T.	T.			.50	.75	.02	.20					.83	.67					.05	T.	.15				.20	T.	.15				3.52
ell	do	.72		.55			.45	.57		.05			.35			.03						.35	.04	.05					.10				3.26
	do	.63	1.00			.16		.70	.18				.38		.10	.05					.36	.01		.03			.13	.18					3 91
h***	Missouri	.47	.16			T.	2.18	.18	.39				.40		.26	.22				.17	.05	.17		.01			.10	.32					5.08
	do	.04	.03			.84		.65	.05	.12			.41		T.							.19						.08					2.41
	Grand	.12	T.			.22	1.99		.08			.12	.07		T.						.54	08	.59				T.	.55					4.36

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
ular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate fall not recorded.

Daily temperatures for August, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	87	93	97	96	91	71	85	85	77	79	81	82	81	71	77	81	88	[illegible]	84	85	87	85	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	78	63	66	65	69	66	61	68	66	53	55	59	59	61	65	66	66	65	67	65	68	65	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	89	91	97	96	89	72	84	85	78	78	80	81	83	71	73	84	[illegible]	89	88	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	62	67	64	71	66	65	69	59	51	54	62	55	64	65	64	64	66	67	65	67	[illegible]	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	85	....	....	....	....	68	83	85	78	78	81	78	81	68	71	82	[illegible]	89	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	77	65	....	....	....	67	66	68	65	54	55	61	61	62	62	65	65	65	65	[illegible]	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	87	93	91	95	90	76	85	86	71	76	79	82	82	75	84	85	88	88	95	87	73	[illegible]	[illegible]	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	70	62	68	64	67	65	67	66	57	52	55	61	60	61	[illegible]	62	62	65	64	63	[illegible]	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	92	91	100	97	92	78	87	88	79	78	85	85	87	73	85	84	[illegible]	90	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	75	67	68	63	68	66	67	69	66	56	55	56	62	64	64	65	65	66	65	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	93	91	92	95	88	71	84	92	71	77	81	79	81	76	84	79	88	92	92	84	84	84	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	68	78	62	63	67	58	65	59	59	48	53	61	55	[illegible]	59	62	63	59	62	[illegible]	[illegible]	63	63	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	96	92	88	90	92	88	83	83	78	76	[illegible]	80	86	79	82	88	88	88	95	87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	77	58	62	60	70	75	67	67	60	51	60	58	58	55	60	64	60	62	64	63	[illegible]	65	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	85	95	96	98	93	71	85	81	76	78	83	79	82	75	82	[illegible]	90	92	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	73	60	64	62	65	63	63	61	62	51	55	59	57	57	61	60	61	60	62	65	[illegible]	65	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	95	97	100	97	93	75	86	85	80	80	83	84	85	72	73	80	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	78	60	61	62	70	65	65	55	64	57	53	58	62	62	58	61	66	65	65	67	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	97	90	95	96	95	88	87	86	82	78	81	82	86	84	80	85	91	[illegible]	94	90	79	[illegible]	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	75	67	65	63	69	67	67	68	65	53	55	60	65	65	65	68	65	67	68	65	[illegible]	68	66	[illegible]	[illegible]	[illegible]	64	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	82	93	94	93	92	73	83	82	76	80	81	81	81	78	78	87	96	93	93	91	81	84	82	80	84	82	83	73	[illegible]	[illegible]
	Minimum	70	61	66	65	71	61	65	69	61	50	50	62	58	60	61	58	61	63	73	65	67	64	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	92	90	92	93	94	85	87	85	78	76	81	79	84	83	80	80	91	88	92	89	78	77	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	79	71	73	68	73	68	70	71	64	60	63	65	66	68	69	71	72	69	71	70	69	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionvill §§	Maximum	90	88	94	97	88	80	86	84	75	81	81	82	85	80	81	92	90	91	93	90	86	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	66	60	58	60	62	53	55	51	55	48	50	55	54	56	54	57	60	[illegible]	[illegible]	60	62	60	62	54	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	95	98	99	98	92	88	85	89	81	81	85	83	88	84	78	83	93	92	94	89	76	79	84	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	75	66	68	61	69	65	66	69	64	58	56	59	63	64	65	66	66	67	68	67	67	68	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																															
Caruthersville	Maximum	101	99	103	104	102	97	100	96	93	88	90	84	91	94	100	90	98	97	97	96	92	92	93	[illegible]	91	[illegible]	98	[illegible]	82	[illegible]
	Minimum	74	73	67	67	70	70	70	70	76	63	58	59	69	64	66	70	67	68	71	70	73	73	69	[illegible]	61	[illegible]	71	62	64	[illegible]
Doniphan	Maximum	96	92	93	94	95	95	91	88	87	81	84	83	84	90	90	85	88	90	90	84	87	86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	75	[illegible]
	Minimum	70	69	64	61	63	66	71	65	66	55	52	55	62	69	67	68	65	73	66	65	75	70	67	54	54	52	57	[illegible]	[illegible]	[illegible]
Jackson	Maximum	99	92	91	94	95	93	90	90	82	78	84	83	89	84	86	86	92	89	92	93	84	86	86	83	83	81	[illegible]	[illegible]	74	[illegible]
	Minimum	71	70	61	61	62	66	68	66	65	53	49	56	61	67	69	70	63	63	65	65	70	[illegible]	66	[illegible]	[illegible]	51	[illegible]	54	57	[illegible]
Marble Hill	Maximum	95	93	90	93	96	91	89	91	85	82	83	82	83	86	85	83	90	90	89	[illegible]	87	86	83	88	85	81	83	[illegible]	79	[illegible]
	Minimum	72	70	65	63	63	66	68	67	65	55	54	55	61	58	70	70	73	[illegible]	65	65	69	67	57	60	52	55	58	[illegible]	[illegible]	[illegible]
Poplar Bluff §§	Maximum	94	89	89	90	91	88	89	89	87	81	83	79	83	86	87	86	89	89	90	90	87	87	89	85	83	82	87	82	63	[illegible]
	Minimum	70	68	62	60	61	65	66	67	65	54	52	51	57	62	66	66	64	64	65	66	67	67	65	55	55	50	52	54	60	[illegible]
Ozark Plateau.																															
Birchtree	Maximum	93	88	90	91	91	90	84	86	81	77	79	71	83	84	88	88	88	88	88	87	84	83	81	79	82	77	85	77	[illegible]	77
	Minimum	68	67	65	61	65	65	66	65	64	53	53	57	63	69	66	66	64	65	68	67	66	66	65	[illegible]	54	54	61	62	67	[illegible]
Cassville	Maximum	90	90	90	87	89	89	88	90	75	78	75	76	74	87	88	78	84	88	88	[illegible]	83	[illegible]	[illegible]	82	82	83	87	87	67	74
	Minimum	65	64	63	60	60	60	61	63	55	58	60	57	58	61	64	60	67	68	63	64	64	64	51	[illegible]	56	54	62	60	57	[illegible]
Eldon	Maximum	93	95	97	95	94	76	87	79	90	84	83	79	86	78	81	91	[illegible]	[illegible]	88	[illegible]	81	82	[illegible]	80	[illegible]	79	[illegible]	76	73	[illegible]
	Minimum	65	67	65	59	57	64	65	65	65	50	50	57	57	62	[illegible]	62	63	64	63	67	64	66	64	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fruit City	Maximum	94	88	91	92	93	90	84	87	82	78	80	71	84	81	86	85	88	89	87	88	85	85	84	82	[illegible]	79	87	77	[illegible]	77
	Minimum	70	69	66	62	64	66	67	66	65	55	51	57	61	64	65	64	67	65	66	69	67	65	65	57	54	[illegible]	62	62	55	[illegible]
Gano	Maximum	96	90	92	94	91	88	84	84	78	75	82	77	81	81	86	82	86	90	88	89	84	80	80	77	80	78	90	[illegible]	[illegible]	74
	Minimum	62	65	63	61	67	60	64	65	63	51	50	55	62	65	65	67	63	63	64	67	65	65	63	55	52	54	64	58	54	[illegible]
Hollister	Maximum	96	95	96	94	98	92	92	90	88	82	80	78	80	92	94	[illegible]	88	[illegible]	88	88	86	[illegible]	84	84	[illegible]	84	80	72	[illegible]	82
	Minimum	66	68	66	70	68	64	60	66	70	62	5	56	64	68	70	72	70	64	62	66	66	64	64	[illegible]	62	60	58	[illegible]	58	[illegible]
Ironton §§	Maximum	94	88	91	92	93	89	85	89	83	79	81	80	85	84	85	[illegible]	89	89	90	89	86	84	83	80	80	80	[illegible]	73	65	77
	Minimum	68	68	51	56	58	60	65	62	63	49	44	50	60	65	68	69	58	61	60	65	67	66	64	53	47	45	57	62	[illegible]	44
Koshkonong	Maximum	93	94	94	92	93	91	90	91	88	77	80	83	83	87	90	[illegible]	89	91	90	91	86	87	84	82	82	83	90	81	69	[illegible]
	Minimum	70	71	70	65	68	64	65	67	63	55	57	56	58	60	59	67	66	66	68	67	65	67	66	59	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lebanon §§	Maximum	94	91	92	89	93	86	85	89	77	78	76	78	83	81	86	84	80	91	87	83	83	[illegible]	79	77	81	75	88	[illegible]	78	[illegible]
	Minimum	71	66	66	62	62	63	66	66	64	50	50	52	66	64	66	65	61	61	63	69	65	64	65	56	51	51	60	62	50	[illegible]
Mountain Grove §§	Maximum	92	90	91	92	92	85	88	88	87	76	78	69	82	85	89	83	87	87	86	85	[illegible]	82	80	78	82	79	80	72	66	75
	Minimum	69	64	65	64	63	65	65	66	59	52	53	58	63	65	65	67	[illegible]	62	64	67	63	64	62	55	46	51	[illegible]	60	55	45
Neosho	Maximum	91	92	92	92	93	88	88	90	89	79	77	75	80	89	92	86	86	88	87	85	87	87	84	82	84	80	[illegible]	[illegible]	[illegible]	87
	Minimum	67	65	67	64	62	68	64	67	63	52	52	59	60	66	66	67	68	[illegible]	64	66	64	65	[illegible]	50	49	[illegible]	62	[illegible]	57	[illegible]
Rolla §§	Maximum	93	94	93	94	92	89	85	96	85	82	84	77	83	86	86	89	[illegible]	93	85	87	84	82	[illegible]	78	87	79	91	[illegible]	72	79
	Minimum	72	68	67	63	64	67	66	67	66	54	52	56	64	65	66	67	63	67	65	69	67	67	65	55	51	[illegible]	61	62	[illegible]	51
Springfield	Maximum	88	88	88	89	90	85	82	87	76	75	77	74	78	86	87	84	85	85	84	82	84	82	79	78	81	84	88	72	67	71
	Minimum	71	66	69	66	71	68	65	70	61	51	56	60	64	66	70	67	68	70	68	66	66	66	64	58	57	65	65	57	56	[illegible]
Southwest Plain.																															
Amoret	Maximum	96	95	95	98	97	78	98	89	85	78	78	84	72	76	75	83	87	88	95	82	86	85	82	82	84	85	86	78	75	78
	Minimum	71	65	66	65	70	64	61	64	63	52	55	52	56	62	67	67	61	65	64	64	67	65	63	....	54	55	68	57	48	49
Appleton City	Maximum	88	94	96	96	94	86	90	90	85	78	81	80	82	76	82	84	87	91	89	85	85	85	82	....	....	....	....	....	....	....
	Minimum	73	67	69	59	76	66	66	67	65	54	56	62	59	63	68	68	65	67	67	[illegible]	68	66	60	....	....	....	....	....	....	....
Clinton	Maximum	91	100	100	97	97	75	90	93	83	82	84	82	85	78	86	82	91	93	93	84	88	85	86	84	86	85	87	77	79	[illegible]
	Minimum	73	66	67	62	67	66	65	63	63	52	53	62	57	63	65	62	63	61	65	61	68	67	67	56	57	64	63	78	50	51
Harrisonville §§	Maximum	86	97	102	101	94	75	89	88	77	79	83	94	85	73	79	81	88	90	89	89	85	85	79	79	85	83	84	70	85	[illegible]
	Minimum	71	64	66	67	71	67	65	65	63	52	54	62	55	56	63	66	63	64	65	67	67	67	65	55	52	56	[illegible]	56	[illegible]	[illegible]
Lamar §§	Maximum	95	98	91	98	96	82	90	94	81	81	82	76	84	93	90	86	90	92	91	87	88	90	87	87	91	89	94	66	76	82
	Minimum	69	68	63	66	67	69	65	66	67	51	51	61	64	67	68	61	65	65	66	68	66	64	67	54	50	62	67	61	56	49
Lamonte	Maximum	88	96	99	97	90	75	88	89	80	85	82	82	83	71	80	83	90	90	89	82	85	75	86	86	84	78	84	71	74	[illegible]
	Minimum	69	60	60	60	69	67	65	63	62	48	50	62	55	61	65	66	61	62	65	66	68	66	65	55	55	62	62	57	74	[illegible]
Marshall	Maximum	93	97	103	99	94	82	88	88	79	80	83	85	81	75	74	85	90	92	89	85	83	85	82	80	82	84	85	.	74	81
	Minimum	....	71	64	62	61	66	64	67	65	51	54	64	55	62	64	66	62	64	65	65	68	65	65	55	52	50	67	...	52	[illegible]
Warrensburg	Maximum	95	101	98	100	94	84	91	91	84	82	81	85	86	77	81	82	90	93	95	84	86	86	84	82	80	86	80	72	79	[illegible]
	Minimum	71	70	69	66	68	67	65	66	63	52	54	56	60	62	65	64	64	65	66	67	68	671	67	55	58	74	67	57	55	52
Warsaw	Maximum	96	97	102	98	96	86	87	93	84	92	93	87	90	89	91	88	94	97	98	87	85	85	86	84	87	87	92	75	81	84
	Minimum	76	65	60	60	67	67	65	67	62	49	48	58	60	63	69	67	63	65	60	60	67	67	67	52	49	55	65	57	56	[illegible]
Northwest Plateau.																															
Chillicothe §§	Maximum	91	93	98	98	84	71	86	87	78	79	81	81	85	77	75	88	91	92	92	90	87	88	82	81	85	88	85	76	82	83
	Minimum	75	64	70	70	73	69	71	68	69	57	64	64	64	77	68	67	67	65	70	72	73	68	76	62	57	67	73	61	57	60
Grant City	Maximum	93	81	93	98	82	80	81	82	75	79	82	86	81	82	85	90	90	93	92	90	87	88	80	79	89	90	86	76	81	[illegible]
	Minimum	69	66	63	64	63	62	58	59	57	51	56	61	57	62	63	58	65	61	64	61	65	62	66	51	52	63	56	52	50	[illegible]
Kansas City	Maximum	88	92	98	97	87	73	87	86	74	76	78	82	81	71	74	81	86	92	87	84	[illegible]	85	80	80	82	83	82	71	76	78
	Minimum	73	72	71	75	67	65	62	66	62	58	61	67	63	62	66	67	69	70	73	70	68	68	69	60	59	66	55	55	55	[illegible]
Kidder §§	Maximum	88	92	97	99	88	76	83	84	76	78	82	80	82	77	73	85	88	89	92	88	82	83	78	77	81	84	85	84	79	79
	Minimum	69	65	65	73	72	66	63	65	62	52	58	65	58	62	64	62	65	65	70	68	67	61	63	55	52	54	72	52	55	[illegible]
Lexington §§	Maximum	99	95	100	98	63	71	87	88	78	80	84	85	85	71	75	84	90	94	92	83	83	86	83	80	85	84	84	76	80	82
	Minimum	74	65	65	67	70	67	63	68	61	50	54	63	58	62	65	66	65	62	65	68	69	67	68	56	56	62	70	64	60	53
Maryville §§	Maximum	84	88	91	97	80	79	79	83	75	80	81	78	83	79	80	89	90	92	90	88	85	89	79	79	84	88	77	76	81	[illegible]
	Minimum	65	64	59	64	67	58	57	58	55	48	49	56	58	58	59	57	57	59	60	63	64	61	63	57	51	55	62	49	49	50
Oregon	Maximum	91	84	90	[illegible]	[illegible]	77	79	82	73	75	78	78	80	77	75	82	85	87	87	83	81	82	77	75	80	81	81	72	76	77
	Minimum	66	66	67	71	64	59	58	60	56	49	57	62	55	62	60	60	63	64	65	[illegible]	64	64	59	[illegible]	52	61	57	50	50	53
St. Joseph	Maximum	87	90	95	98	84	76	81	86	74	77	81	83	82	79	74	87	89	89	89	86	85	86	79	79	84	85	81	75	79	80
	Minimum	68	65	[illegible]	[illegible]	66	61	62	64	59	53	58	65	61	61	61	61	61	64	66	70	67	67	66	60	56	65	56	52	51	55
Trenton	Maximum	95	88	96	94	90	81	81	86	78	75	79	80	80	78	80	84	85	87	89	87	82	82	77	75	79	84	83	75	77	78
	Minimum	61	64	66	64	68	61	65	64	62	53	57	56	61	62	63	61	63	62	67	67	68	64	65	58	55	61	60	54	50	54

[illegible] 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is ch[illegible]
[illegible]


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
G

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR AUGUST, 1917, AT THE UNIVERSITY OF MI COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 61 and 62.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau stan described in Circular L. Horizontal distance of the anemomet pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 11 feet. Distance of rain gage fr 2.6 feet. The ground in the immediate vicinity of the pan slop north, average 5 per cent grade. The soil is covered by blue gr being part of the University campus. There are no bodies of wat nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by Philip G. McGinnis, observer, Weather Bureau. This is one of the "Class A" stat signed to furnish practical information relative to evaporation. complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are publishe are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for August, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	[illegible]
Daily evaporation	.435	.195	.317	.334	.266	.265	.010	.110	.256	.256	.220	.173	.109	.167	.104	.014	.114	.180	.167	.162	.097	.131	117	.281	241	.185	091	.145	.052	.15
Daily wind movement	52	28	23	36	24	38	34	21	34	41	32	10	21	28	23	15	12	20	15	15	17	23	23	56	55	21	33	37	15	2

*Total in next following measurement. † Indicates minus (−) Observations taken at

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	6.38	+2.57	2.22	0	10	17	1	13	......	Wm. R. Bennett.
Boonville	40	5.50	+2.03	1.78	0	11	16	5	10	sw.	C. Randecker.
Cape Girardeau	10	....	....	....	.	..	..	.	..	.....	D. L. Albert.
Glencoe	0	5.66	....	2.46	0	9	19	2	10	s.	Vint R. Neel.
Hermann	43	3.17	−0.04	1.22	0	11	10	4	17	se.	C. T. Maushund.
New Madrid	23	5.54	+2.07	2.50	0	10	17	4	10	nw.	Miss Josie Smith.
Osceola	17	5.27	+2.46	1.25	0	11	14	5	12	......	Wm. E. Mathews.
Pacific	0	5.66	....	2.40	0	8	19	6	6	......	R. C. Dougherty.
Steelville	15	6.02	+2.57	2.06	0	11	20	0	11	s.	Wm. J. Drennen.
Tuscumbia	0	3.89	....	1.20	0	11	13	1	17	w.	C. B. Wright.
Union	0	6.52	....	2.00	0	10	15	8	8	sw.	J. Wm. Keller.
Valley Park	0	3.95	....	2.00	0	10	20	3	8	nw.	H. J. Lucksinger.
Waverly	2	4.02	....	1.64	0	11	15	8	8	sw.	J. W. Cauthorn.

OCT 31 1917

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

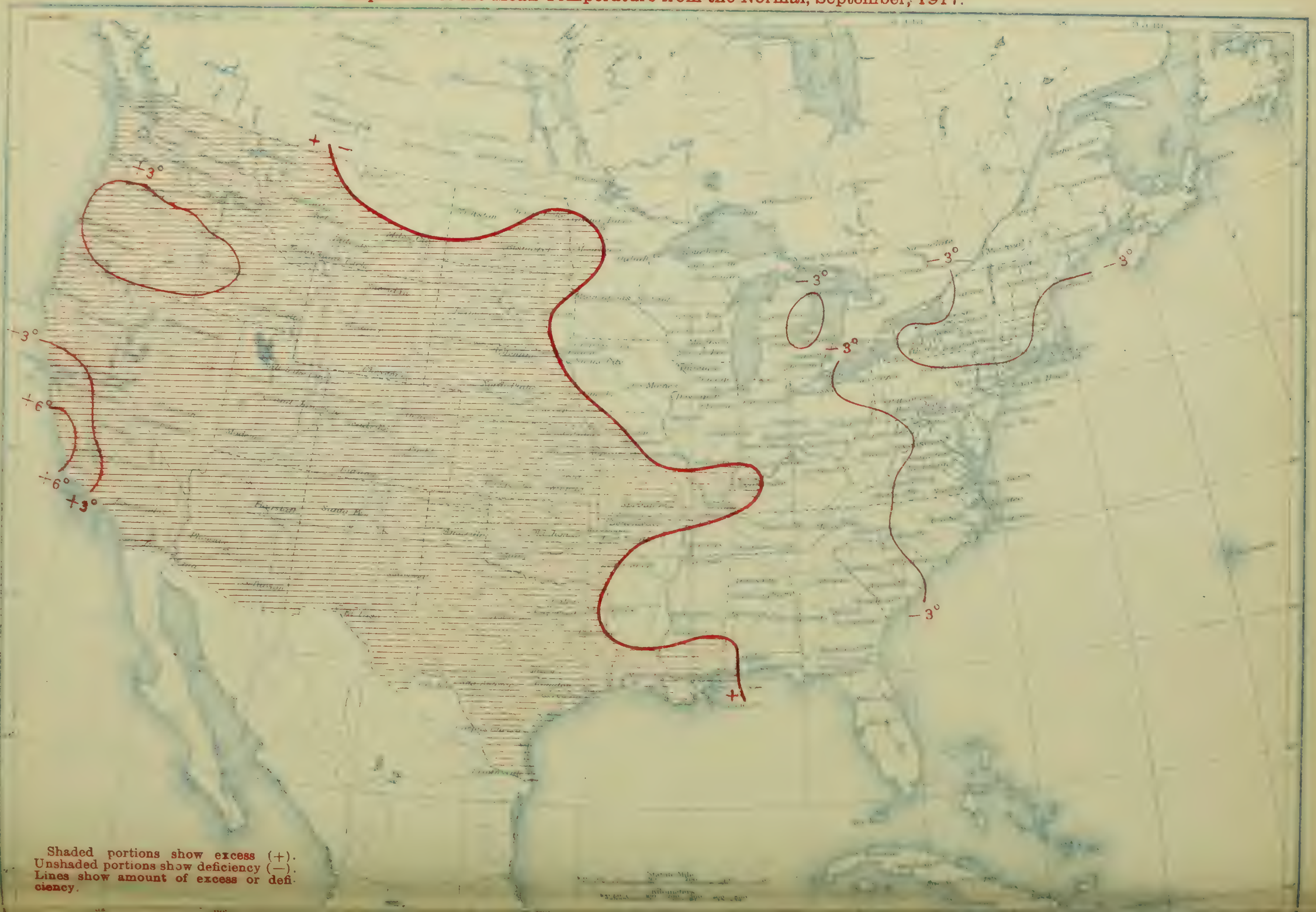
SEPTEMBER, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE.
OCTOBER 23, 1917.

Departure of the Mean Temperature from the Normal, September, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXI. COLUMBIA, MO., SEPTEMBER, 1917. No. 9.

GENERAL SUMMARY.

ptember, 1917, in Missouri, was a pleasant month and fa-
le for maturing of crops and for fall plowing and seeding.
pt in a few localities, the total rainfall was sufficient for
nt needs; and there were no damaging storms or frosts.
warmest weather obtained during the first week, and the
t during the second week. The temperature extremes,
on the 1st, and 33°, on the 12th, were well within the
of previous years. Freezing weather during September
ne part of this State is not uncommon; and in the 29
' record only 9 other Septembers have passed without
ging frost in some county.
general rain of the 25-26th was opportune. It revived
res, replenished stock water, besides it put the soil in ex-
t condition.
the close of the month the bulk of an exceptionally fine
crop was safe, probably more than 90 per cent of it. Many
had been filled, and much corn cut.
out 70 per cent of the wheat land had been prepared for
ng; and about 20 per cent had been sown, and was germi-
g nicely. The increased acreage over the normal amount
eported to be about one-third. Stock were fat. Apple
ng was in progress, with fair yields; and most minor crops
in satisfactory condition.

TEMPERATURE.

monthly mean temperature for the State, 69 stations re-
ng, was 67.9°. The departure from the normal for 65
ns having 10 or more years' record was minus 1.2°. The
rature was below normal in all sections, but departures
more marked in the Ozark Plateau than in the other di-
s. The first seven days of the month were quite warm,
num temperatures of 90° to 100° occurring generally;
e remainder of the month, save three or four days during
cond decade, was cooler than normal. The 1st was the
est day, with maximum 101°, in the extreme southeastern
of the State; the next highest, 100°, occurred at Clifton
on the 3d, in the central part of the State. The average
er of days with 90° or higher was 4. The 11th was the
t day generally; but the lowest temperature, 33°, occurred
orning of the 12th, at Ironton, which is situated in the
lia Valley, eastern part of the Ozarks. The highest month-
an, 75.8°, occurred at Caruthersville, and the lowest was
, at Unionville. The greatest daily range was 50°, at
aw, on the 28th.
ght frosts occurred at a few stations on the 11th and 27th,
esulted in no damage.

PRECIPITATION.

e average precipitation, as determined from the records of
ations, was 2.78 inches. The departure from the normal
5 stations having 10 or more years' record was minus 1.09
s. About 12 counties along the dividing line of the south-
rn plain and Ozark Plateau received somewhat more pre-
ation than the normal amount, and also a few counties
of the Missouri River; about 24 stations received less than
hes, and five stations in the southeastern lowlands got less
one inch. Except in the last named division the total
pitation, although generally less than the average, was suf-
t for present needs and kept the soil in good condition.
most general rains fell on the 7-8th, and 26-27th.
e greatest monthly amount was 5.23 inches, at Mount Ver-
The greatest amount that occurred in any 24 consecutive
s also fell at that station, 4.13 inches, on the 8th. The least monthly amount was 0.05 inch, at Sikeston.

The average number of days with 0.01 inch or more precipitation was 5.

EVAPORATION.

The total evaporation for the month, at Columbia, Mo., was 3.81 inches; the total precipitation was 2.38 inches; the total wind movement over the surface of the pan was 809 miles, and the mean temperature, 68°. During the same month in 1916, these data were, in order named, 3.84 inches; 4.43 inches; 808 miles, and 66°.

WIND.

The prevailing winds were from the south. The total number of miles, 8 stations reporting, was 5,427, or an average hourly velocity of about 7 miles. Fresh to strong local winds occurred on the 3d and 7th; but there were no damaging winds during the month.

SUNSHINE AND CLOUDINESS.

The number of clear days exceeded the average. The average number of hours of sunshine, 6 regular stations reporting, was 271, or about 72 per cent of the possible, and 7 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fog, light—22d. Frost, light—11th and 27th. Hale—3d. Halos, solar—12th. Lunar—2d, 7th and 26th. Thunderstorms, more or less general—6th, 7th and 8th. Local—1st, 2d, 3d, 4th, 16th, 19th, 25th and 26th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.09	87	......	303	81	4,391	6.1	23	n.	7
Hannibal	30 09	86	......	......	......	5,012	7 0	44	w.	7
Kansas City	30.07	78	55	263	71	7,039	9.8	32	nw.	7
St. Joseph	30.07	84	63	275	74	4,726	6.6	21	nw.	19
St. Louis	30.08	80	64	270	72	7,575	10.5	38	ne.	3
Springfield	30.09	84	61	253	68	5,687	7.9	24	s.	7
Cairo, Ill	30.07	88	67	......	......	4,684	6.5	43	n.	3
Keokuk, Iowa	30.10	86	65	262	69	4,305	6.0	26	n.	3

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	65.2	−3.7	97	28	1.11	−2.56	......	0.0	4	....	....	....
1889	64.7	−4.2	94	31	4.66	+0.99	......	0.0	11	....	....	....
1890	63 7	−5.2	98	34	3.98	+0.31	......	0.0	9	....	....	....
1891	70.6	+1.7	104	30	0.63	−3.04	......	0.0	6	....	....	....
1892	67.8	−1.1	97	32	2.39	−1.26	3.00	0.0	4	19	6	5
1893	69.9	+1.0	107	26	3.92	+0.25	5.20	0.0	6	17	7	6
1894	68.5	−0.4	101	34	4.93	+1.26	3.07	0.0	5	13	11	6
1895	71.8	+2.9	104	25	2.45	−1.22	6.21	0.0	4	19	8	3
1896	65 0	−3.9	101	28	4.17	+0.50	4.40	0.0	10	11	10	9
1897	74.3	+5.4	105	27	0.74	−2.93	2.13	0.0	2	23	5	2
1898	70.9	+2.0	103	30	6.74	+3 07	6.10	0.0	9	15	9	6
1899	67 4	−1.5	108	16	2.04	−1.63	3.01	0 0	4	20	6	4
1900	71.1	+2.2	100	29	4.81	+1.14	3.79	0.0	10	13	10	7
1901	68.9	0.0	103	27	2.31	−1.36	2.80	0.0	6	18	8	4
1902	63 2	−5.7	95	30	4.78	+1.11	6.55	0.0	10	15	6	9
1903	66 4	−2 5	98	32	4.41	+0.74	6.77	0.0	8	17	6	7
1904	69.6	+0.7	96	34	3.85	+0.18	2.46	0.0	3	16	8	6
1905	69.6	+0.7	98	41	7.67	+4.00	7.90	0.0	10	15	6	9
1906	71 9	+3.0	98	36	4.15	+0.48	4.28	0.0	11	15	8	7
1907	68.9	0.0	101	31	1.93	−1.74	2.25	0.0	6	18	7	5
1908	71.6	+2.7	99	28	1.80	−1.87	2.68	0.0	4	18	8	4
1909	68.7	−0.2	105	28	4.62	+0.95	4.48	0.0	8	18	6	6
1910	69.5	+0.6	97	34	5.58	+1.91	4.63	0.0	10	14	6	10
1911	73.7	+4.6	105	39	7.13	+3.46	7.75	0.0	11	13	7	10
1912	68.6	−0.3	105	27	3.06	−0.61	3.61	0.0	6	17	5	8
1913	69.4	+0.5	109	27	4 63	+0.79	4.08	0.0	9	13	7	10
1914	69.6	+0.5	99	35	6.27	+2 52	9.22	0.0	9	15	8	7
1915	70.6	+1.5	98	34	5 25	+1.51	5.91	0.0	7	16	7	7
1916	67.8	−1.5	101	27	2.94	−0 86	2.80	0.0	6	19	7	4
1917	67.9	−1.2	101	33	2.78	−1.09	4.13	0.0	5	19	6	5

Climatological data for September, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Brunswick	Chariton	650	36	68.0	+1.9	92	3†	44	11†	35	2.47	-1.90	1.03	0	8	16	2	12	ne.	Louis Benecke.
Clifton Hill	Randolph	731	....	69.4	+0.8	100	3	40	11	36	2.90	-0.96	1.54	0	8	17	10	3	.....	L. S. Hanan.
Columbia	Boone	784	26	67.5	-0.3	92	7	42	22	34	2.38	-0.47	0.98	0	6	17	8	5	se.	U. S. Weather Bure
Fayette	Howard	725	31	68.2	-0.2	94	3	42	11	35	4.15	-0.64	2.68	0	6	....	....	....	....	Prof. T. B. Smith.
Fulton	Callaway	818	12	67.9[a]	-0.9	96	3	39	11†	43	1.29	-2.80	0.54	0	4	....	....	....	....	Dr. O. M. Weigle.
Gorin	Scotland	700	27	....	....	....	....	....	....	....	2.60	-1.90	1.31	0	9	14	7	9	nw.	J. W. Pulliam.
Hannibal	Marion	534	23	66.4	-1.5	91	7	40	11	32	2.43	-1.13	1.01	0	8	17	9	4	sw.	U. S. Weather Bure
Jefferson City	Cole	557	30	67.9	-1.1	95	3	42	11	35	1.98	-1.20	1.12	0	6	21	6	3	s.	Miss Emma Swift
Keytesville	Chariton	660	3	....	....	....	....	....	....	....	3.09	....	1.59	0	[illegible]	....	....	....	....	J. T. Deavey M. D.
Kirksville	Adair	969	24	66.2	+0.2	89	3	37	11	33	3.59	-0.84	1.88	0	6	17	9	4	s.	Prof. Mark Burro
Louisiana	Pike	469	38	65.0	-2.9	88	1†	34	11	40	2.55	-1.23	1.02	0	7	22	4	4	e.	J. T. Farrell
Macon	Macon	875	18	66.0	-2.4	94	3	37	11	40	2.59	-1.58	1.00	0	8	17	7	6	sw.	John A. Cook.
Mexico	Audrain	797	38	66.8	-2.0	93	3	36	11	38	2.24	-2.20	1.10	0	4	19	0	11	s.	R. M. Llewellyn.
Oakfield	Franklin	793	35	68.4	-1.9	91	2†	40	11	34	2.69	-1.21	1.27	0	6	15	12	3	s.	L. L. Stemes.
Palmyra	Marion	652	4	65.5	-3.1	92	1	34	11	35	3.22	-0.55	1.51	0	7	16	4	10	sw.	W. B. Markell.
St. Catherine	Linn	850	3	67.4	....	91	3	39	11	32	2.82	....	1.08	0	8	16	11	3	se.	L. D. Baker.
St. Charles	St. Charles	456	38	68.4	+1.2	93	2	39	11	35	1.98	-1.15	1.19	0	3	19	6	5	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	69.0	-1.0	91	2	43	11	24	3.50	+0.59	1.57	0	8	16	9	5	s.	U. S. Weather Bure.
St. Louis (2)	....do	578	4	69.0	....	92	2	43	11	26	2.90	....	1.16	0	9	16	10	4	e.	St Louis Universit
Shelbina	Shelby	779	24	....	....	....	....	....	....	....	4.33	+0.69	1.48	0	6	....	....	....	....	S. G. Parsons.
Steffenville	Lewis	650	23	67.3	-1.4	95	1†	37	11	43	3.70	-0.84	1.75	0	7	14	12	4	ne.	Frank Hall.
Unionville	Putnam	1,072	23	64.4	-2.9	93	3	36	11	41	3.85	-0.94	1.40	0	8	19	5	6	nw.	Geo. W. Davis.
Warrenton	Warren	865	25	68.6	-0.2	95	7	38	11	37	1.38	-2.58	0.90	0	5	17	11	2	n.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	574	45	65.7	-0.7	90	1	41	11	28	5.29	+1.32	3.28	0	8	14	9	7	ne.	U. S. Weather Bur
Section means and extremes		....	....	67.3	-1.0	100	3	34	11	43	2.92	-1.02	3.28	0	7	17	8	5	s.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	J. M. Seaborn.
Caruthersville	Pemiscott	220	25	75.8	+2.7	101	1	48	11†	41	0.97	-2.20	0.64	0	2	24	5	1	e.	H. E. Averill
Doniphan	Ripley	344	11	68.7	-2.6	90	7	40	12	38	0.11	-3.66	0.08	0	2	25	3	2	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	68.8	-1.3	93	2†	38	12	44	1.23	-2.36	0.95	0	5	20	5	5	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	69.2	-1.6	94	3	38	12	41	1.15	-2.54	0.80	0	3	18	12	0	s.	Dr. A. F. Hendricks
Patton (near)	Bollinger	500	1	....	....	....	....	....	....	....	0.40	....	0.25	0	2	....	....	....	....	George F. Ellis.
Poplar Bluff	Butler	339	12	68.4	-3.5	91	2†	40	12	41	0.21	-2.96	0.11	0	2	19	5	6	.....	Miss Belle Kinne.
Sikeston	Scott	328	15	75.2[a]	+4.8	94	2†	45	11	55	0.05	-2.93	0.04	0	2	26	4	0	s.	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	70.6	+0.4	90	1	45	11	28	1.40	-1.07	0.64	0	4	15	13	2	n.	U. S. Weather Bure
Section means and extremes		....	....	71.0	-0.2	101	1	38	12	44	0.69	-2.53	0.95	0	3	21	7	2	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	69.0[b]	-0.9	91	3†	41	28	36	1.48	-2.14	0.98	0	2	26	1	3	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	28	65.6	-4.5	86	3†	41	28	31	3.97	-0.24	1.60	0	3	23	3	4	ne.	A. C. Fink.
Cassville	Barry	1,500	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Mrs. Zuma Bloomer
Crocker	Pulaski	1,126	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Roy W. Reed.
Dean	McDonald	1,000	17	68.0[a]	-3.4	92	7	36	28	42	3.55	+0.13	1.68	0	4	23[a]	3[a]	3[a]	.....	H. E. Dean.
Eldon	Miller	934	15	67.3	-2.6	93	7	40	11	36	3.83	+0.08	2.86	0	3	20	7	3	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	69.4	....	98	7	45	12†	41	1.28	-2.17	0.85	0	3	22	7	1	e.	R. C. Walton.
Gano	Dent	1,250	12	66.4	-4.1	90	7	38	28	37	2.25	-2.41	1.14	0	3	23	4	3	ne.	A. C. Leach.
Goodland	Iron	1,000	11	65.7	-2.0	92	2†	35	12†	42	1.21	-2.65	0.53	0	5	22	4	4	s.	F. M. Adams.
Hollister	Taney	735	7	69.0	-2.8	96	7	42	14	42	3.00	-0.62	1.40	0	3	25	0	5	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	66.8	-2.1	90	2	39	28	34	3.24	-0.75	1.70	0	3	24	2	4	se.	R. F. Harmon.
Ironton	Iron	925	38	65.7	-2.1	91	2†	33	12	43	2.86	-0.86	1.77	0	6	7	22	1	ne.	W. H. Delano.
Koshkonong	Oregon	958	15	70.0	-1.2	92	2†	44	11†	35	1.64	-1.99	1.10	0	3	14	13	3	sw.	R. M. Hitt
Lebanon	Laclede	1,265	27	66.0	-4.0	90	2†	40	28†	41	2.74	-1.39	1.59	0	3	25	1	4	s.	Leonard E. Dickers
Lockwood	Dade	1,078	21	68.8	-3.2	93	1	44	22†	34	4.07	0.00	1.87	0	5	21	6	3	ne.	C. S. Crow.
Mountain Grove	Wright	1,490	17	66.4	-2.6	90	2	39	28	35	4.50	+0.29	1.98	0	6	17	9	4	nw.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	67.0	-3.8	90	6	48	10	34	5.23	+1.60	4.13	0	2	23	4	3	sw.	C. L. White.
Neosho	Newton	1,011	33	68.0	-2.7	91	7	37	28†	40	2.09	-2.11	0.72	0	7	25	2	8	s.	W. O. Buck.
Rolla	Phelps	1,139	34	68.0	+0.2	94	2	41	11†	40	2.82	-0.98	1.46	0	2	22	5	8	e.	Prof. Elmo G. Harr
Springfield	Greene	1,350	28	68.0	+0.1	88	3	46	11	26	3.74	-0.02	2.13	0	3	20	5	5	s	U. S. Weather Burea
Section means and extremes		....	....	67.5	-2.5	98	7	33	12	43	2.97	-0.90	4.13	0	4	21	6	3	s.	
Southwest Plain.																				
Amoret	Bates	831	7	67.7	-1.3	95	7	42	30	41	4.41	+0.43	2.60	0	4	19	2	9	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	25	67.8[f]	-2.9	95	7	44	30	33	3.35	-0.17	2.73	0	4	16[d]	6[d]	4[d]	se.	W. G. Bigelow.
Clinton	Henry	765	29	69.1	-1.3	96	7	42	30	36	3.22	-0.45	2.24	0	4	22	4	4	se.	A. E. Derwent, M. D
Harrisonville	Cass	912	43	66.8	-1.7	95	7	42	30	35	3.25	-1.13	1.63	0	6	13	2	15	n.	A. J. Sharp.
Lamar	Barton	980	35	70.7	0.0	98	7	41	30	41	4.16	-0.15	2.25	0	5	18	0	12	s.	Joe W. Springer.
Lamonte	Pettis	863	27	67.4	-3.6	94	7	35	22	45	3.39	-1.08	1.90	0	4	18	9	3	se.	J. Ed. Hall.
Marshall	Saline	779	25	67.9[a]	-0.4	93	7	40	30	39	4.46	-0.55	2.90	0	7	19	6	5	sw.	Dr. W. H. Black.
Nevada	Vernon	860	22	70.4	+1.3	94	7	43	30	33	2.80	-1.43	1.76	0	4	23	3	4	ne.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Geo. H. Collins.
Warsaw	Benton	715	11	70.0	-0.6	98	8	37	22†	50	4.75	+0.75	2.10	0	4	17	10	3	e.	J. R. Smith, M. D.
Section means and extremes		....	....	68.7	-1.1	98	7†	35	22	50	3.75	-0.42	2.90	0	5	18	5	7	se.	
Northwest Plateau.																				
Avalon	Livingston	730	30	70.0	+0.4	93	1	43	11	30	3.28	-1.80	1.80	0	5	23	3	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	67.1	+0.4	91	7	39	27	39	3.52	-0.35	1.60	0	8	13	10	7	sw.	M. H. Moulton.
Chillicothe	Livingston	768	....	68.2	-2.2	92	7	38	30	30	4.24	....	2.04	0	4	20	2	8	se.	Dr. J. R. Campbell.
Conception	Nodaway	982	31	66.6	-0.4	93	3	40	27	41	4.01	+0.22	1.32	0	8	17	9	4	n.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	16	....	....	....	....	....	....	....	3.78	-0.46	1.40	0	6	18	9	3	s.	Robert R. Wynne, J
Grant City	Worth	1,134	23	67.2	+0.2	94	3	42	27	32	2.08	-1.96	0.85	0	5	22[a]	1[a]	6[a]	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	68.8	+1.3	92	7	46	27	27	3.33	-0.43	2.46	0	7	18	5	7	s.	U. S. Weather Burea
Kidder	Caldwell	1,020	25	67.6	+0.1	88	7†	42	27	32	3.30	-0.78	1.45	0	6	19	2	9	sw.	J. F. Sharp.
Lexington	Lafayette	688	31	68.9	+0.3	93	7	42	11	35	2.59	-2.03	1.50	0	6	17	0	13	s.	J. W. Keithley.
Liberty	Clay	864	27	68.7[b]	-0.8	93	3†	43	11†	33	3.55	-0.63	1.88	0	5	18	4	6	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	64.6	-0.8	92	3†	38	27†	35	2.31	-2.00	0.59	0	12	18	2	10	s.	J. R. Brink.
Oregon	Holt	1,048	60	65.3	-1.8	89	3	37	27	28	2.96	-0.73	0.63	0	7	15	7	8	s.	Tom Curry.
St Joseph	Buchanan	967	44	67.8	....	91	3	44	27	29	1.60	-1.74	0.53	0	8	17	8	5	se.	U. S. Weather Burea
Tarkio	Atchison	976	4	66.0	-0.2	93	5	38	27	36	1.88	-1.58	0.66	0	8	18	6	6	sw.	John F. Frazier.
Trenton	Grundy	822	21	66.2	-1.3	88	7	44	22†	28	3.58	-0.73	1.32	0	7	22	5	3	se.	W. H. Estes.
Section means and extremes		....	....	67.4	-0.4	94	3	37	27	41	3.07	-1.07	2.46	0	7	18	5	7	s.	
State means and extremes		....	....	67.9	-1.2	101	1	33	12	50	2.78	-1.09	4.13	0	5	19	6	5	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete repor
used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R.
No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for September, 1917.

ations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
st Plain.																																		
	Missouri		T.		T.	.10			.96		T.	.03		.16	.04												1.90	.92					4.11
	Grand		.02	.19	.05			T.	.20	T.	.05			.19						T.							1.03	.74					2.47
ill	Chariton		.05		.06		.02	.72						.07												.21	1.54	.23					2.90
	Missouri				.40			.73			T.			.01							T.					.23	.92	.09					2.38
	do		T.		.39			.50					.23								T.					.33	2.35	.35					4.15
	do				.52																	.05					.18	.54					1.29
	Meramec								.80	T.																		1.20	.11				2.11
	Mississippi			.07	1.31		.10	.03			.01			.07							.30					.02	.69						2.60
	do			.35	.41			.27	T.					.04							.29					.03	.91	.13					2.43
	Missouri				.21	.17			.09													.04					T.	1.30	.01				1.82
	do				.05	.10			1.12	.02																		.68	.01				1.98
	Chariton		.02		.21			.60			.05			.18												.44	1.59						3.09
	Mississippi		.18	T.	1.88		.34	.07																		.07	1.05						3.59
	do			1.02	.44			.19						T.							.24	.04					.10	.52					2.55
	Chariton		.02		.43	.20		.12	.02	T.				.14								T.					.66	1.00					2.59
	Mississippi				.78				.10																		.26	1.10					2.24
	Meramec			.01	T.			.94	.26											.17	T.	.04					T.	1.27					2.69
	do								.23												.05	.01						1.20	T.				1.49
	Mississippi				.86	.06			.01					.04								.58					.16	1.51					3.22
	Grand		.26		.70		.17	.13						.03						T.	T.					.40	1.08	.05					2.82
	Missouri			T.	.09				.70												T.							1.19					1.98
	Mississippi			T.	.01		.18	1.57	T.											.43	.01	.04					.62	.64					3.50
	do			T.	.02		.02	1.16	.01											.50	.01	.03					.51	.64					2.90
	do				1.20		1.03						.27								.03						1.48	.32					4.33
	do		T.	T.	1.75		T.	.05	T.					.10							.60	.05				T.	.90	.25					3.70
	Meramec								.21	.01												.01						1.18	.04				1.45
	Grand	T.			1.40	.55	.35	.65	.10												.08						.42	.30					3.85
	Meramec				T.	T.			.30	T.											.04	T.	T.					1.27	.15				1.76
	Mississippi				.28	.04			.12		T.											.04					T.	.90					1.38
owa**	do		.01	3.28	.06		.15	.57						.13							.22						.87						5.29
Lowlands.																																		
ville	Mississippi						T.	T.	T.		T.						.33	.64				T.						T.					0.97
	Black		T.						.08											.03													0.11
	Mississippi		.95					.02												.20	.01							.05					1.23
	do																.15			.80								.20					1.15
	do				.50													.06			.20								.05				0.81
ar)	do																					.25						.15					0.40
all	Black									T.										T.	.11								.10				0.21
	Mississippi																		.04									.01					0.05
	do								.64											.56	.01	.19						T.					1.40
teau.																																		
	Gasconade								1.44													T.						1.60	T.				3.04
	Black								.50																			.98					1.48
	Osage								1.60																		1.15	1.22					3.97
	White																																
	Gasconade																																
	Neosho								.50					.40													.97	1.68					3.55
	Osage								2.86																		.45	.52					3.83
	Black								.42								.01			T.								.85					1.28
	Meramec								1.14		T.									.05	T.	T.						1.06					2.25
	Black								.37											.07	.19	.05						.53					1.21
	White								1.40																		.50	1.10					3.00
	Gasconade						.10		1.44											T.								1.70					3.24
	Mississippi				T.			.04	.35												1.77	T.	.12					.55	.03				2.86
ng	Black								.31												.23							1.10					1.64
	Osage								1.13	T.										.02	T.							1.59	T.				2.74
	do								.85						.05								.03				1.87	1.27					4.07
Grove	White							.29	1.98	.30											.12							1.73	.08				4.50
on	Neosho								4.13																		1.10						5.23
	do						.06		.30				T	.25	.07					.02							.67	.72					2.09
	Meramec							T.	1.36																			1.46					2.82
	White								2.13											T.	T.						1.44	.17					3.74
	Meramec							T.	.44																			1.42					1.86
	Osage								2.88	.02																		1.03					3.93
Plain.																																		
	Osage		T.						.63		T.		T.	1.12							T.					T.	2.60	.06					4.41
ity	do								.37					T.												.07	2.73	.18					3.35
	do								.48																	.23	2.24	.27					3.22
ille	do		.01	.07				.02						.35													1.63	1.17					3.25
	Neosho								.70	.03				.31						T.							2.25	.87					4.16
	Missouri							T.	T.		T.			.55												.52	1.90	.42					3.39
	do		T.		.07			.26	.07		T.			.56						T.	T.					.40	2.90	.20					4.46
	Osage								.27					.37													1.76	.40					2.80
	do								1.67	.03																	1.58	.64					3.92
ng	Missouri																																
	Osage								2.10					T.												.21	2.10	.34					4.75
	Missouri		T.	T.				.08	.19		T.			.22													2.17	1.13					3.79
Plateau.																																		
	Grand		1.25				.03	.20																		1.50	.30						3.28
	do	.03	1.60		.02		.70	.30			.05		T.								T.					.60	.22						3.52
	do		2.04					.50																			1.40	.30					4.24
	Missouri	.21	.96		T.		.31	.29			.03		.41													.48	1.32						4.01
	Grand		1.40				.78	.40			.06		T.	T.						T.						.39	.75						3.78
	do	.10	.85		T.		T.	.47			T.										T.	T.				.35	.31						2.08
ty**	Missouri		.01					.21			.01		.11	.04												1.53	1.42						3.33
	Grand		1.15					.30				.02		.03													1.45	.35					3.30
	Missouri		T.	.04				.18	.15		T.			.08													1.50	.64					2.59
	do							.30					T.	.30												1.02	1.88	.05					3.55
	do	.24	.04			.02	.15	.50			.02			.11						.15			.01			.09	.39	.59					2.31
**	do	.33					.49	.58					.27						.23							.43	.63						2.96
	do	.01			T.		.11	.39			T.		.16						.03	.01						.38	.51						1.60
	do	.01					.23	.66					.02						.02	.14						.58	.22						1.88
	Grand		.52		.03		1.42	.26			T.		.02							T.						1.15	.18						3.58

ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the servation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
ar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
all not recorded.

Daily temperatures for September, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	89	85	92	84	90	86	92	66	81	68	69	76	81	84	87	90	86	25	80	64	86	79	81	85	84	64	58	77	77	75
	Minimum	57	64	66	65	65	65	66	62	60	55	44	44	50	61	62	68	59	54	64	59	50	41	47	54	54	62	49	49	49	47
Columbia	Maximum	88	88	92	86	89	85	92	71	77	66	67	75	80	84	85	86	81	84	81	64	74	76	78	82	86	69	66	75	75	72
	Minimum	65	69	65	61	67	67	70	61	60	47	42	49	60	61	56	54	60	62	59	56	50	42	53	51	59	59	47	45	50	45
Fayette	Maximum	88	88	91	87	88	87	93	70	77	65	69	75	81	86	86	88	82	84	83	64	75	78	81	85	84	64	66	76	76	74
	Minimum	63	68	67	65	64	69	70	60	60	52	42	48	58	64	58	60	58	54	57	57	51	47	50	50	60	50	50	46	53	47
Hannibal	Maximum	89	84	88	73	88	78	91	69	75	62	66	74	81	86	86	85	79	81	82	67	72	75	77	81	85	67	66	75	74	68
	Minimum	66	68	64	64	65	67	67	59	60	48	40	48	59	62	56	60	57	53	55	69	48	44	49	49	58	50	49	46	51	44
Jefferson City §§	Maximum	90	92	95	86	91	90	94	66	78	66	70	75	81	85	85	87	83	85	82	65	73	77	80	85	85	76	67	76	79	74
	Minimum	56	65	64	65	63	68	70	63	61	57	42	45	48	60	55	57	60	51	54	55	58	46	47	50	51	60	51	45	47	45
Kirksville	Maximum	88	81	89	75	87	79	87	77	75	67	67	74	78	84	86	86	82	83	78	66	73	76	80	82	81	79	66	75	71	76
	Minimum	63	60	61	59	62	60	66	52	55	49	37	45	60	61	59	61	55	50	58	57	53	43	48	50	65	49	46	58	50	42
Louisiana	Maximum	88	88	88	74	86	82	88	80	75	74	68	75	80	87	86	84	82	83	84	75	76	73	75	86	85	72	65	68	64	65
	Minimum	60	65	60	64	58	68	66	60	60	53	34	38	60	58	48	50	49	46	50	55	58	38	39	40	48	60	50	48	45	45
Macon §§	Maximum	90	85	91	82	90	80	91	64	79	66	70	78	81	86	89	90	85	85	80	68	76	79	82	85	84	65	69	76	76	75
	Minimum	51	63	63	61	61	63	61	57	57	48	37	38	47	58	56	56	54	49	50	58	55	43	44	47	47	56	47	47	47	44
Mexico §§	Maximum	91	89	93	87	90	83	93	78	79	66	70	79	82	88	89	88	83	86	85	66	74	78	82	86	87	65	68	77	79	73
	Minimum	58	66	61	61	62	66	68	60	52	49	36	45	48	59	51	51	52	48	48	55	57	40	45	48	50	57	48	42	45	45
Oakfield	Maximum	88	91	91	78	91	87	90	76	77	69	67	75	83	84	81	82	79	85	86	73	63	75	77	84	83	79	67	77	82	74
	Minimum	65	67	66	63	63	69	68	60	61	51	40	45	54	59	68	60	56	55	58	56	58	48	52	56	58	60	50	43	49	45
St. Catharine	Maximum	86	81	91	82	87	81	88	83	77	66	68	76	79	84	87	87	83	84	79	69	74	77	80	83	80	66	66	74	74	73
	Minimum	63	64	65	62	64	61	68	58	57	50	39	48	59	64	60	59	57	52	60	58	55	46	52	53	60	49	46	47	50	56
St. Louis (1)	Maximum	87	91	89	78	88	87	89	69	76	62	66	74	82	83	85	82	78	79	84	69	62	75	76	81	80	79	65	73	86	70
	Minimum	68	72	68	67	65	71	67	62	62	49	43	53	58	60	63	64	60	62	64	61	57	53	57	59	61	63	52	50	57	53
Unionvill §§	Maximum	90	80	93	76	88	76	90	71	72	68	70	78	80	86	87	85	83	84	74	65	75	76	80	83	80	66	70	72	70	68
	Minimum	53	58	58	60	62	58	60	55	51	48	36	37	50	56	58	56	52	48	50	56	50	40	42	46	50	56	42	44	48	44
Warrenton §§	Maximum	91	91	90	80	92	83	95	66	79	64	70	79	87	88	88	85	81	87	85	67	68	77	80	85	86	87	66	76	79	71
	Minimum	63	67	66	63	63	70	67	60	60	52	38	42	55	60	57	59	60	56	59	60	57	49	50	50	57	61	50	47	51	46
Southeast Lowlands.																															
Caruthersville	Maximum	101	97	98	98	100	97	98	93	90	80	81	89	90	91	96	97	91	86	87	85	80	83	89	90	91	89	82	85	92	84
	Minimum	69	70	67	67	67	67	72	73	67	63	48	48	54	53	57	66	62	63	65	65	58	62	57	65	57	58	62	53	53	49
Doniphan	Maximum	89	88	89	86	89	88	90	83	79	74	70	76	82	82	85	87	84	84	84	79	72	75	79	80	80	81	72	73	83	75
	Minimum	61	61	66	65	63	66	68	68	66	56	45	40	47	47	56	67	62	57	61	58	54	56	49	50	52	53	60	42	45	45
Jackson	Maximum	92	93	93	86	90	92	91	88	84	70	71	78	84	88	89	91	89	87	89	81	67	77	81	83	85	83	70	79	82	75
	Minimum	69	64	65	62	60	63	66	71	65	56	41	38	45	44	51	59	54	55	56	56	56	54	44	48	50	52	58	39	41	38
Marble Hill	Maximum	90	93	94	90	90	89	91	84	82	73	73	76	82	86	91	92	85	89	87	87	75	79	81	82	82	80	72	77	86	79
	Minimum	65	63	65	62	59	6'	61	70	63	53	40	38	45	46	53	61	67	54	57	58	54	55	47	49	51	53	58	40	45	45
Poplar Bluff §§	Maximum	89	91	90	87	89	86	91	83	83	74	71	84	82	84	83	90	84	83	86	80	72	75	82	81	83	80	68	77	82	78
	Minimum	50	62	65	63	60	63	65	60	64	59	43	40	43	46	47	60	59	57	59	60	53	55	49	50	51	52	54	43	41	48
Ozark Plateau.																															
Birchtree	Maximum	88	90	91	88	88	91	91	81	78	78	....	74	80	81	81	88	86	85	83	75	68	....	81	81	79	78	68	75	83	73
	Minimum	61	65	66	63	63	66	65	66	63	58	....	42	52	54	52	52	60	56	59	58	54	....	55	52	55	56	53	41	50	43
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	88	90	92	88	89	89	93	81	77	69	70	73	79	82	85	85	81	83	82	79	75	77	80	82	81	72	67	74	78	72
	Minimum	68	61	60	63	63	63	67	54	67	64	40	42	57	57	50	56	49	48	46	54	57	41	56	45	54	56	48	41	51	45
Fruit City	Maximum	88	92	90	86	88	89	98	84	76	69	69	76	81	84	86	87	82	87	85	74	66	74	79	82	82	80	71	76	85	86
	Minimum	62	66	59	63	64	70	61	66	63	55	57	45	54	53	57	63	59	57	61	58	56	52	51	54	55	57	54	45	50	45
Gano	Maximum	89	89	89	85	89	89	90	79	79	66	69	76	81	83	84	83	79	83	81	66	62	70	75	83	81	78	70	74	78	71
	Minimum	63	64	63	62	63	65	63	63	60	53	39	39	53	55	53	58	55	50	56	54	55	44	44	47	53	57	49	38	49	43
Hollister	Maximum	90	92	92	90	92	90	96	84	88	88	76	80	82	84	82	84	86	86	84	80	78	80	84	86	86	82	70	78	80	78
	Minimum	60	62	62	60	62	60	66	60	62	52	50	48	46	42	44	46	52	54	58	56	48	48	50	52	58	62	57	44	48	44
Ironton §§	Maximum	88	91	90	86	88	87	91	82	77	67	69	76	82	83	87	87	82	84	85	73	66	76	77	80	81	78	68	75	84	74
	Minimum	57	58	61	60	56	61	63	67	64	57	35	33	43	44	49	50	48	48	52	51	59	50	40	46	47	51	59	35	41	41
Koshkonong	Maximum	91	92	92	89	90	87	92	90	80	74	71	79	82	85	86	86	84	86	84	76	72	78	81	84	84	81	69	74	84	74
	Minimum	64	65	66	64	65	67	65	65	65	54	44	44	54	54	57	67	58	58	61	59	57	54	52	54	56	56	54	45	50	47
Lebanon §§	Maximum	88	90	90	85	87	88	90	77	76	65	69	74	80	81	82	83	81	82	80	63	69	78	78	82	80	76	65	73	78	79
	Minimum	47	60	64	64	65	65	66	65	60	58	43	43	48	58	54	53	53	50	51	53	53	43	43	51	53	56	49	40	40	40
Mountain Grove §§	Maximum	86	90	89	85	86	88	88	78	78	69	71	72	78	79	79	89	82	86	82	68	68	75	78	79	78	75	65	74	68	71
	Minimum	56	62	61	63	63	66	66	64	61	57	41	44	47	56	55	57	57	54	57	53	53	45	49	54	56	56	50	39	44	41
Neosho	Maximum	88	90	90	88	88	88	91	87	76	74	74	80	80	85	83	84	86	83	84	77	73	77	82	84	84	79	68	77	82	76
	Minimum	57	57	60	60	62	65	68	67	66	57	48	48	56	60	49	57	54	48	58	48	55	44	43	49	55	61	49	37	45	37
Rolla §§	Maximum	91	94	93	91	90	91	93	75	81	69	74	76	84	88	86	89	84	87	83	66	67	78	82	86	83	77	67	78	80	73
	Minimum	53	63	64	63	66	66	66	65	62	58	41	41	44	57	55	55	58	53	55	53	54	45	46	50	50	58	50	43	43	44
Springfield	Maximum	86	87	88	84	86	86	88	77	73	66	69	72	78	80	80	82	80	81	80	64	67	74	77	79	79	73	64	73	78	71
	Minimum	64	65	66	66	67	68	70	64	63	54	46	51	59	64	61	65	62	60	62	55	56	50	56	58	59	54	49	47	54	47
Southwest Plain.																															
Amoret	Maximum	90	90	92	88	89	90	95	88	79	75	75	76	81	84	83	85	84	83	79	72	74	77	85	84	77	71	69	77	79	78
	Minimum	59	58	60	65	63	64	63	63	56	55	43	43	57	61	55	59	56	50	61	53	50	47	45	43	59	50	43	45	47	42
Appleton City	Maximum	....	....	....	....	....	....	95	88	77	74	71	76	83	84	85	87	86	86	82	71	76	77	81	84	80	68	68	77	80	77
	Minimum	....	....	....	....	....	....	78	65	61	57	46	52	60	63	56	61	59	56	61	54	58	48	50	55	60	52	48	45	52	44
Clinton	Maximum	90	92	93	88	91	92	96	87	82	72	73	78	85	86	88	91	89	86	83	73	78	81	83	85	82	66	69	76	70	70
	Minimum	60	64	64	65	64	65	70	64	61	56	43	50	60	60	55	59	57	51	51	54	58	45	50	54	60	51	49	44	45	42
Harrisonville §§	Maximum	90	78	90	85	89	90	95	69	77	63	71	76	80	85	86	85	84	84	78	65	75	75	81	85	75	62	68	78	76	75
	Minimum	58	62	60	60	65	65	68	63	58	56	43	44	51	59	57	56	59	49	53	55	56	47	52	53	53	60	45	45	47	42
Lamar §§	Maximum	93	95	96	97	92	93	98	80	81	68	75	81	82	86	89	91	91	90	87	68	79	84	87	88	87	75	72	80	86	80
	Minimum	60	62	63	94	64	65	70	68	64	59	49	50	58	58	54	61	61	51	54	53	55	43	50	55	60	60	49	42	49	41
Lamonte	Maximum	89	89	91	85	89	89	94	82	80	68	71	78	81	85	86	89	84	87	80	71	75	80	82	85	80	67	67	76	76	73
	Minimum	60	66	65	65	65	65	71	61	60	54	38	39	59	62	52	50	54	45	59	55	45	35	44	46	61	51	48	45	52	41
Marshall	Maximum	89	90	88	89	91	91	93	84	80	73	70	78	81	84	86	88	85	85	82	66	78	79	82	85	84	61	67	73	78	74
	Minimum	60	65	65	....	62	65	68	61	59	52	41	44	60	59	55	56	57	51	56	55	58	47	48	46	57	59	48	43	50	40
Warrensburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	96	94	96	90	95	97	98	87	86	72	70	76	88	86	92	94	86	90	89	70	82	80	86	92	90	72	78	89	80	80
	Minimum	52	63	60	63	63	62	68	64	62	56	43	45	60	58	48	53	58	45	52	50	60	37	52	52	60	61	50	39	46	37
Northwest Plateau.																															
Chillicothe §§	Maximum	90	84	91	84	88	82	92	67	78	67	69	74	80	81	88	87	84	83	75	64	77	78	81	84	77	63	70	76	75	71
	Minimum	67	68	68	69	69	68	67	66	62	55	50	50	54	66	67	67	60	53	53	63	54	50	48	47	54	54	42	45	47	38
Grant City	Maximum	82	78	91	82	93	83	91	75	73	65	70	72	83	85	90	87	83	84	76	61	67	77	81	84	75	70	70	78	70	71
	Minimum	63	61	68	65	61	58	66	57	52	50	48	50	61	61	63	62	59	63	57	56	53	50	51	53	60	47	42	46	51	46
Kansas City	Maximum	85	79	89	83	87	89	92	71	77	63	70	73	78	85	85	84	83	84	75	63	74	78	79	83	68	63	67	75	74	74
	Minimum	68	70	70	67	70	71	69	59	58	54	48	55	61	66	64	63	63	60	61	57	56	55	55	60	63	48	46	53	57	47
Kidder §§	Maximum	86	81	87	82	86	81	88	69	76	64	70	74	78	85	88	88	82	85	76	67	71	78	81	85	70	57	67	71	73	72
	Minimum	62	66	65	65	66	64	48	60	54	53	44	52	62	65	62	62	58	53	62	60	56	58	52	53	61	57	42	48	53	46
Lexington §§	Maximum	89	84	91	87	90	90	93	66	80	68	74	75	82	86	87	88	85	85	80	64	76	80	82	81	77	64	68	76	76	75
	Minimum	64	67	64	67	65	69	70	62	60	58	42	50	60	66	57	55	58	51	64	58	57	45	50	50	62	61	46	50	56	46
Maryville §§	Maximum	76	80	92	84	92	83	89	90	76	66	70	66	82	88	90	87	82	78	73	60	68	77	80	79	68	53	58	77	70	70
	Minimum	53	60	60	62	61	57	57	56	66	50	42	42	52	59	59	58	57	53	54	55	52	47	45	45	50	50	38	38	47	44
Oregon	Maximum	75	82	89	85	88	82	87	79	74	67	66	66	78	82	84	85	80	80	80	64	65	73	76	80	71	66	65	71	69	70
	Minimum	60	61	62	63	65	57	64	57	53	50	45	52	60	61	62	59	57	54	55	55	53	48	51	55	60	46	37	47	50	40
St. Joseph	Maximum	81	86	91	85	89	86	90	73	79	64	71	66	80	85	88	88	84	84	75	62	71	78	81	82	66	59	68	75	72	74
	Minimum	66	68	65	66	70	62	68	59	56	53	45	55	61	65	67	59	60	56	59	57	51	50	52	56	59	48	44	52	50	47
Trenton	Maximum	85	84	86	84	85	79	88	81	73	64	65	74	78	80	81	83	84	78	71	67	70	72	74	77	73	65	68	70	68	68
	Minimum	64	64	64	66	63	61	66	59	55	52	48	49	62	65	62	59	63	55	62	58	51	41	52	54	58	49	41	47	50	46

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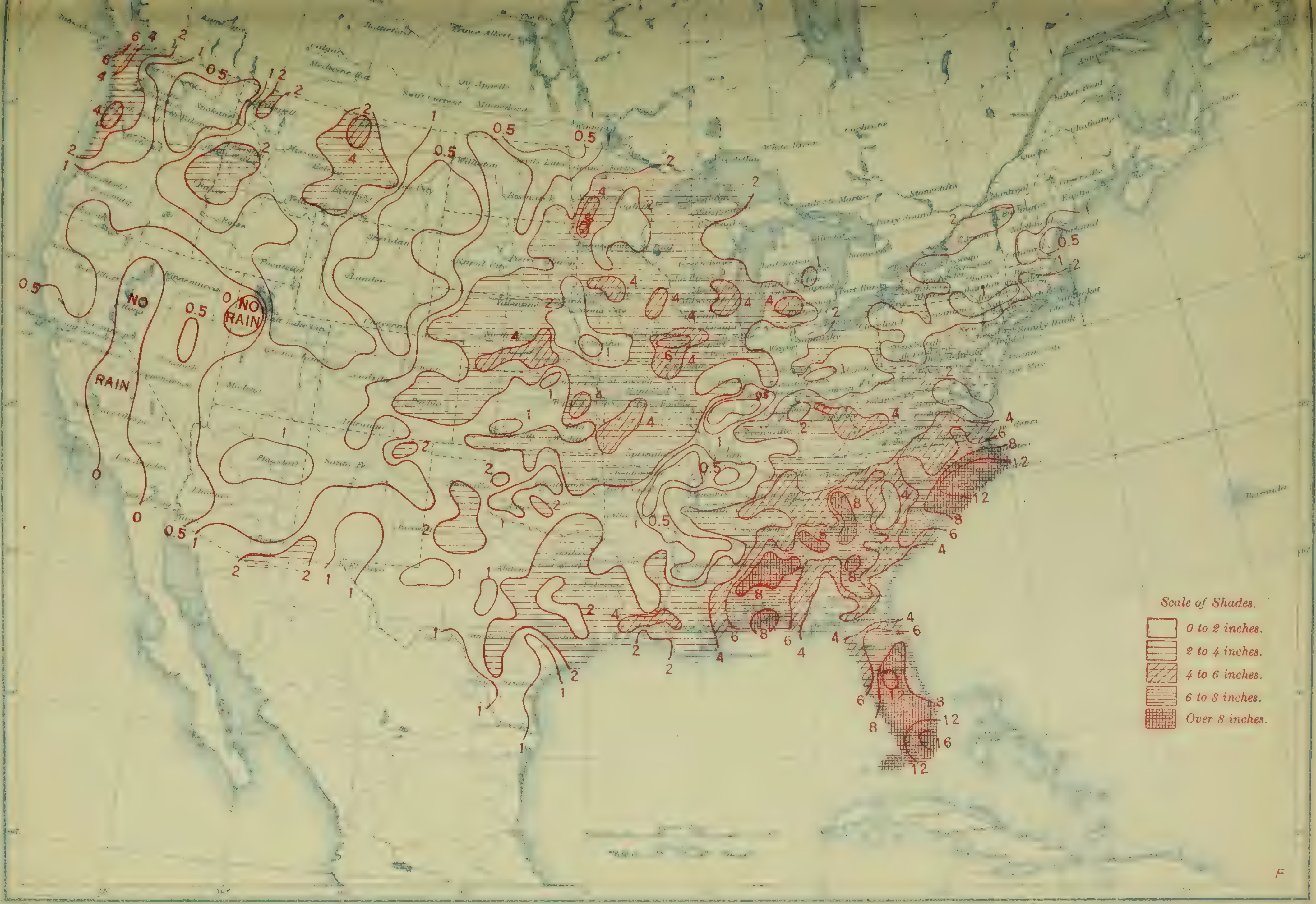
a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning: the maximum temperature then read is cha
the preceding day, on which it almost always occurs.


Scale of Shades.
▭ 0 to 2 inches.
▤ 2 to 4 inches.
▨ 4 to 6 inches.
▤ 6 to 8 inches.
▦ Over 8 inches.
NO RAIN
NO RAIN
F

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR SEPTEMBER, 1917, AT THE UNIVERSITY OF MI SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 69 and 70.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standards described in Circular L. Horizontal distance of the anemometer fr pan, 2 inches. Height of cups of anemometer above rim of pan. inches. The instrument shelter is 100 feet southeast of the pan: heig of thermometers above ground, 11 feet. Distance of rain gage from pa 2.6 feet. The ground in the immediate vicinity of the pan slopes to t north, average 5 per cent grade. The soil is covered by blue grass s being part of the University campus. There are no bodies of water nea nor are there any irrigation projects under way nearby. The gene topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising offic being George Reeder, Meteorologist and Section Director. The obser tions in the table herewith, were taken by Philip G. McGinnis, assista observer, Weather Bureau. This is one of the "Class A" stations c signed to furnish practical information relative to evaporation. Full a complete climatic records have been made at Columbia, Mo., by t Weather Bureau for about 28 years. These records are published by a are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for September, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Daily evaporation	.142	.167	.173	.227	.142	.140	.125	.129	.069	139	.143	.125	.104	.115	.143	.151	.149	.159	.119	.126	.051	.129	108	.123	167	.099	069	.100	.093	.145	....	3
Daily wind movement	22	20	20	26	30	22	23	49	23	34	37	24	26	25	20	17	32	20	16	30	51	28	22	18	24	24	32	26	20	38	....	

*Total in next following measurement. † Indicates minus (−) Observations taken at 6:45 a. m

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	3.04	−0.66	1.60	0	2	22	3	5	......	Wm. R. Bennett.
Boonville	40	4.11	−0.64	1.90	0	7	18	1	11	s.	C. Randecker.
Cape Girardeau	10	....	....	....	.	..	.	.	..	.....	D. L. Albert.
Glencoe	0	2.11	....	1.20	0	3	20	4	6	s.	Vint R. Neel.
Hermann	43	1.82	−2.20	1.30	0	6	14	3	13	ne.	C. T. Maushund.
New Madrid	23	0.81	−2.52	0.50	0	4	14	4	12	ne.	Miss Josie Smith.
Osceola	17	3.92	+0.09	1.67	0	4	21	1	8	......	Wm. E. Mathews
Pacific	0	1.49	....	1.20	0	4	18	2	10	......	R. C. Dougherty'
Steelville	15	1.86	−1.36	1.42	0	2	22	0	8	s.	Wm. J. Drennen.
Tuscumbia	0	3.93	....	2.88	0	3	17	0	13	w.	C. B. Wright.
Union	0	1.45	....	1.18	0	5	16	6	8	...	J. Wm. Keller.
Valley Park	0	1.76	....	1.27	0	4	18	3	9	nw.	H. J. Lucksinger.
Waverly	2	3.79	....	....	0	5	17	3	10	sw.	J. W. Cauthorn.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

LIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

OCTOBER, 1917

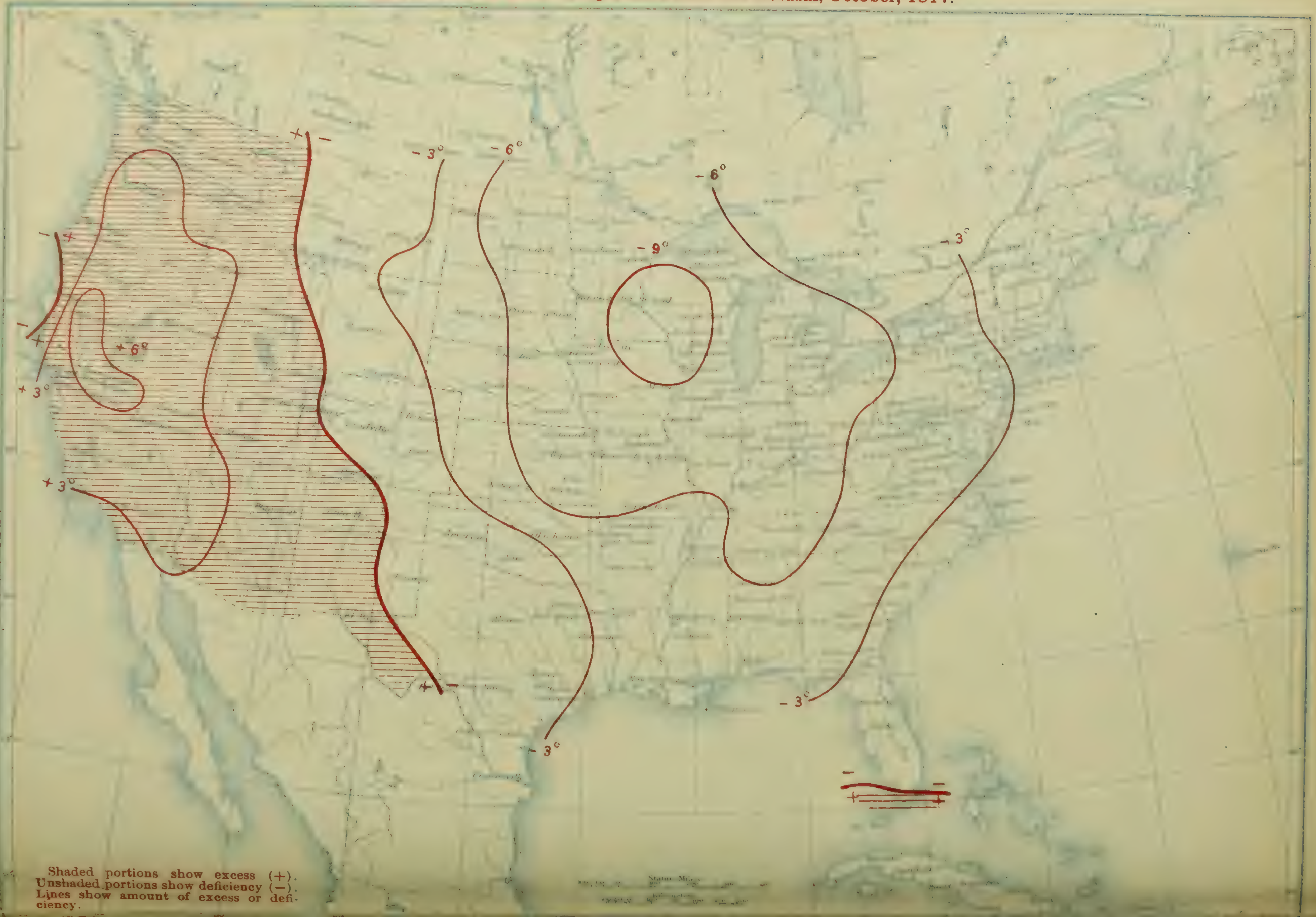
BY

GEORGE REEDER
METEOROLOGIST

1862 1889

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
NOVEMBER 20, 1917.

Departure of the Mean Temperature from the Normal, October, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

I. COLUMBIA, MO., OCTOBER, 1917. No. 10.

GENERAL SUMMARY.

er, 1917, in Missouri, was the coolest on record; and e driest. There were many bright days, however, which relatively dry atmosphere, made it a pleasant month physiological side and one favorable for outdoor work, he prevailing low temperatures.

g frost on the 6th, 8th and 9th rather prematurely put the growing season in all parts of the State, except eastern lowlands, and over that section on the 13th. at night was quite common on and after the 6th. The g temperatures during the last two weeks were, in fact, parable with the usual temperatures experienced during ast part of November and the first week or ten days of r.

recipitation of the month was markedly below the average wever, several other Octobers during the past 29 years r, namely, 1893, 1895, 1897, 1904 and 1906. On the nd, the average for the State, 1.16 inches, is only about of the amount that fell in October a year ago. Notding the light precipitation there was sufficient moishe soil at the close of the month for present needs, tock water was becoming scarce in some localities.

t quite a severe local storm in Greene County during ing of the 28th, (for detail description see page 80), re no damaging winds.

wing of wheat was practically completed, the acreage out one-third larger than usual. At the close of the ost of the grain was up and conditions good generally. per cent of the bottom-lands corn was damaged by erwise an exceptionally fine crop matured. Most of is still in the fields. Stock continued in fair to good ; but pastures were rather short.

TEMPERATURE.

thly mean temperature, 69 stations reporting, was 49.8°. The rture from the normal for 65 stations having 10 or more years' minus 7.4°, the greatest deficiency in 29 years. Except about ur days during the first decade and from about the 14th to the eratures were continuously below normal. The 15th, 16th and the warmest days, when maximum temperatures ranged be- and 90°, but only 4 stations experienced a temperature of 90° The highest was 93°, at Caruthersville on the 16th. A freeze o to five successive nights occurred during each decade. The ather occurred at the close of the month. From 6 a. m. of the a. m. of the 30th, a period of 28 hours, the temperature at Section Center, did not rise above 32°. This is classed as winr. The lowest temperature recorded was 12°, at Maryville on nd 31st. Although this October was the coldest on record, the mperatures, 93° and 12°, are within the limits of previous e average number of days with temperature below 32° was 12. n half of the State was somewhat colder than the western half. frost was general over the north-central and northeastern coun- 6th. General, except in the southeastern counties, on the 8th; last mentioned section on the 13th.

PRECIPITATION.

rage precipitation, 85 stations reporting, was 1.16 inches. The from the normal for 74 stations having 10 or more years' recinus 1.49 inches. The total monthly fall was below normal at . The first half of the month was practically rainless, but latter half light rains were quite frequent. The area of least on, less than 1 inch, consists of about 25 counties of the Osage , and Moniteau and Boone counties. Only three stations, Fruit rty, and Patton, received 2 inches or more. The least monthly ll at Crocker, 0.04 inch.

as general on the 23d and 29th, but south of the Missouri River about as fast as it fell; in most of the central and northern however, the ground was covered to an appreciable depth. On hand, it rapidly evaporated and was of little or no benefit. rage number of days with 0.01 inch or more precipitation was 6.

EVAPORATION.

al evaporation for the month, at Columbia, Mo., was 2.63 inches. (See Daily Evaporation on page 80.) The total rainfall was 0.72 inch; the wind movement over the surface of the pan, 1,511 miles; the mean temperature, 49°, and the percentage of sunshine, 68. During the same month in 1916, these data were, in order named, 2.45 inches; 1.55 inches; 1,161 miles; 55°, and 63 per cent.

WIND.

The prevailing winds were from the northwest. The average monthly wind movement for the State, 8 stations equipped with anemometers reporting, was 8,242 miles, or about an hourly velocity of 11.1 miles. This is about 29 per cent above the normal for October. Fresh to strong gales obtained on the 17th, 22d, 26th, and 28th.

SUNSHINE AND CLOUDINESS.

The number of bright days did not vary much from the normal. The average number of hours of sunshine for the State was 216, or about 60 per cent of the possible, and about 6 per cent below normal.

MISCELLANEOUS PHENOMENA.

Frost, killing—6th, 8th, 9th, generally outside of the larger cities; on the 12th, and 13th in the large cities and in the extreme southeast. Halos, lunar—2d, 24th, 26th, and 27th. Halos, solar—5th, 7th, 10th, 16th, 24th, and 31st. Sleet—9th and 29th.

Thunder heard—2d, 3d, 17th, 18th, 25th, 28th, and 29th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.03	75	......	237	68	6,889	5.3	32	n.	28
Hannibal	30.02	74	......	......	......	7,488	10.1	33	s.	17
Kansas City	30.05	62	44	241	70	10,262	13.8	46	nw.	11
St. Joseph	30.04	66	47	208	60	7,593	10.2	36	nw.	22
St. Louis	30.03	70	60	189	54	11,227	15.1	46	se.	25
Springfield	30.06	74	52	226	65	9,136	12.3	36	nw.	11
Cairo, Ill	30.06	74	57	......	......	6,859	9.2	32	w.	26
Keokuk, Iowa	30.02	76	58	166	45	6,536	8.8	27	sw.	26

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	53.6	−3.5	89	24	2.65	+0.21	.....	.....	7	....	....	.....
1889	53.8	−3.3	91	27	2.50	+0.06	.....	.....	6	....	....	....
1890	54.8	−2.3	91	22	2.24	−0.20	.....	.....	6	....	....	.....
1891	55.7	−1.4	98	19	1.11	−1.33	.....	.....	3	....	....	....
1892	57.5	+0.6	95	16	2.28	−0.16	2.40	0.0	5	16	7	8
1893	56.7	−0.4	95	16	0.99	−1.45	2.81	.....	10	20	8	3
1894	57.6	+0.5	91	18	1.74	+0.70	3.52	T.	6	17	8	6
1895	51.2	−5.9	89	15	0.35	−2.09	1.20	T.	2	21	6	4
1896	54.1	−3.0	90	19	2.48	+0.04	2.68	0.0	5	19	6	6
1897	62.5	+5.4	99	23	0.71	−1.73	1.70	0.0	3	22	6	3
1898	53.5	−3.6	94	19	4.23	+1.79	4.51	1.4	8	11	7	13
1899	62.4	+5.3	100	24	2.93	+0.49	2.53	0.0	5	20	6	5
1900	62.4	+5.3	92	25	4.18	+1.74	4.04	0.0	7	17	7	7
1901	60.1	+3.0	96	24	1.64	−0.80	2.98	0.0	6	18	8	5
1902	59.5	+2.4	88	28	2.52	+0.08	2.69	0.0	5	21	5	5
1903	57.2	+0.1	90	19	2.85	+0.41	3.80	0.0	6	19	6	6
1904	57.6	+0.5	90	19	0.90	−1.54	2.46	0.0	3	20	7	4
1905	55.1	−2.0	90	20	1.64	+2.20	7.24	0.3	5	17	6	8
1906	56.3	−0.8	94	17	0.87	−1.57	1.55	0.0	10	15	7	9
1907	56.7	−0.4	94	18	2.90	+0.16	3.46	0.0	7	19	5	7
1908	56.3	−0.8	92	21	2.74	+0.30	4.90	0.8	5	18	6	7
1909	57.2	+0.1	96	20	2.77	+0.33	2.57	T.	6	19	5	7
1910	59.4	+2.3	94	15	2.71	+0.27	5.50	0.0	5	22	4	5
1911	56.9	−0.2	96	25	3.30	+0.86	5.12	0.2	8	11	7	13
1912	59.1	+2.0	97	21	3.83	+1.39	5.12	0.7	..	20	5	6
1913	51.7	−2.5	93	11	4.46	+1.94	2.80	3.3	9	15	6	10
1914	59.2	+2.0	88	19	4.54	+2.04	5.40	0.0	7	14	6	11
1915	59.8	+2.9	95	22	1.19	−1.45	1.97	0.0	3	23	5	3
1916	58.0	+0.7	95	20	2.17	−0.54	3.90	0.3	6	18	5	8
1917	49.8	−7.4	93	12	1.16	−1.49	2.00	0.2	6	16	8	7

Climatological data for October, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	36	50.1	−4.7	86	15	26	13†	48	1.35	−1.45	0.57	0.4	7	19	6	12	nw.	Louis Benecke.
Clifton Hill	Randolph	731	....	49.8	−7.1	84	4	19	30	41	1.00	−0.85	0.46	0.2	7	15	9	7	......	L. S. Harlan.
Columbia	Boone	784	26	48.6	−6.2	84	15	20	30	42	0.72	−1.70	0.21	0.2	9	13	9	9	nw.	U. S. Weather Bureau
Fayette	Howard	725	31	47.9	−8.9	84	4†	19	30	43	1.12	−1.35	0.76	0.5	6	...	...	...	...	Prof. T. B. [illegible].
Fulton	Callaway	818	12	49.8[a]	−7.8	89	15	18	13†	45	1.25	−1.25	0.33	0.2	11	21	6	4	nw.	Dr. O. M. Weigle.
Gorin	Scotland	700	27	......	......	......	......	......	......	......	1.51	−0.88	0.50	T	9	7	6	18	nw.	J. W. [illegible]
Hannibal	Marion	534	23	47.9	−8.0	84	17	22	13	39	0.94	−0.70	0.42	0.2	10	12	10	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	30	49.0	−7.7	88	15	20	30	53	0.56	−1.81	[illegible]	0.1	5	21	5	5	w.	Miss Emma Swift.
Keytesville	Chariton	660	3	......	......	......	......	......	......	...	0.75	......	0.52	0.2	5	...	...	...	......	J. T. Dewey, M. D.
Kirksville	Adair	969	21	47.0	−7.0	80	15†	16	30	37	1.12	−1.11	0.67	T	6	10	19	2	n.	Prof. Mark Burrows
Louisiana	Pike	469	38	46.2	−9.9	82	17	15	13	37	1.59	−0.93	0.50	0.8	7	16	4	11	n.	J. T. Farrell
Macon	Macon	875	18	46.5[a]	−10.8	85	15	18	30	47	1.00	−1.78	0.57	0.5	5	9	17	5	w.	John A. Cook.
Mexico	Audrain	797	38	47.6	−8.9	85	15	20	13†	41	1.08	−1.24	0.58	T	3	19	12	0	w.	R. M. Llewellyn.
Oakfield	Franklin	793	35	50.4	−8.2	88	15	19	30	42	0.97	−1.89	0.37	T.	7	8	16	7	w.	E. E. Stones.
Palmyra	Marion	652	4	45.4	−12.0	82	17	16	31	46	1.03	−1.38	0.47	0.2	6	18	3	10	nw.	W. B. Markell.
St. Catherine	Linn	850	3	48.4	......	81	15	17	30	40	1.13	....	0.60	0.2	8	8	17	6	nw.	L. D. Baker.
St. Charles	St. Charles	456	38	50.6	−7.3	88	14	21	30	37	1.56	−0.98	0.45	0.2	4	9	13	9	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	51.1	−7.3	85	15	25	30	34	1.87	−0.51	1.13	T	10	7	14	16	s.	U. S. Weather Bureau
St. Louis (2)	do	578	4	50.2	......	86	15	24	30	35	1.51	....	0.74	0.1	11	10	12	9	nw.	St. Louis University.
Shelbina	Shelby	779	24	......	......	......	......	......	......	...	0.97	−2.65	0.65	......	3	...	...	...	......	S. G. Parsons.
Steffenville	Lewis	650	23	48.6	−8.6	89	15	17	13†	48	1.05	−1.09	0.30	T.	7	3	19	9	n.	Frank Hall.
Unionville	Putnam	1,072	23	44.4	−11.0	80	4†	15	29	52	1.98	−0.42	1.35	0.5	5	20	7	4	nw.	Geo. W. Davis.
Warrenton	Warren	865	25	48.3	−7.3	86	15	19	30	41	1.00	−1.73	0.40	T	6	15	11	5	nw.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	574	45	46.3	−8.2	79	17	21	30	34	1.93	−0.56	1.00	T.	11	10	11	10	nw.	U. S. Weather Bureau
Section means and extremes				48.3	−8.3	89	15	15	13†	53	1.22	−1.23	1.35	0.2	7	13	10	8	nw.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	......	......	......	......	......	......	...	......	......	......	......	...	...	...	...	......	J. M. Seaborn.
Caruthersville	Pemiscott	220	25	58.6	−2.3	93	16	26	30	41	1.53	−1.29	1.01	0	4	24	2	5	s.	H. L. Averill.
Doniphan	Ripley	344	11	52.8	−5.0	84	15†	22	30	41	1.56	−1.45	0.80	0	6	22	6	3	nw.	W. W. Martin.
Jackson	Cape Girardeau	458	25	51.2	−6.4	89	15†	17	13	46	1.75	−1.20	0.81	T	4	12	10	9	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	53.2	−4.6	87	15	21	13	48	0.90	−1.49	0.50	0	2	12	16	3	s.	Dr. A. F. Hendricks.
Patton (near)	Bollinger	500	1	......	......	......	......	......	......	...	2.50	....	1.00	0	4	...	...	...	......	George F. Ellis.
Poplar Bluff	Butler	339	12	51.6	−8.6	87	15†	20	30	54	1.09	−1.71	0.36	0	7	17	4	9	......	Miss Belle Kinne.
Sikeston	Scott	328	15	......	......	......	......	......	......	...	......	......	......	......	...	...	...	...	......	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	53.6	−5.5	84	15†	28	30	37	1.42	−1.21	0.72	T.	6	13	10	8	n.	U. S. Weather Bureau
Section means and extremes				53.5	−5.4	93	16	17	13	54	1.53	−1.39	1.01	T	5	17	8	6	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	50.8[c]	−7.3	87	15	21	30†	37	1.11	−1.35	0.70	0	3	24	3	4	s	V. H. Kirkendall.
Bolivar	Polk	1,071	28	47.6	−11.0	82	15	19	30	37	0.30	−2.78	0.10	0	4	17	6	8	se.	A. C. Fink.
Cassville	Barry	1,500	5	......	......	......	......	......	......	...	......	......	......	......	...	...	...	...	......	Mrs. Zuma Bloomer.
Crocker	Pulaski	1,126	5	49.2	−5.1	73	3†	26	18	36	0.04	−2.83	0.04	0	1	29	2	6	s.	Roy W. Reed.
Dean	McDonald	1,000	17	53.0[a]	−7.3	89	10	13	30	42	0.99	−1.97	0.64	T.	4	24[a]	4[a]	2[a]	sw.	H. E. Dean.
Eldon	Miller	934	15	49.6	−8.5	87	15	17	30	39	0.39	−2.32	0.18	T.	6	11	12	8	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	51.9	......	88	15	20	30	43	2.10	−0.66	2.00	0	2	20	7	4	nw	R. C. Walton.
Gano	Dent	1,250	12	49.4	−8.6	88	15	20	30	46	1.79	−1.77	1.30	0	6	17	5	9	s.	A. C. Leach.
Goodland	Iron	1,000	11	49.6	−5.9	89	15	16	30	47	1.24	−1.74	0.56	0	4	22	6	3	w.	F. M. Adams.
Hollister	Taney	735	7	53.7	−6.6	84	4†	20	30	42	0.80	−2.14	0.45	0	3	22	0	9	nw.	W. P. Chapmann.
Houston	Texas	1,280	23	50.8	−6.3	86	16	19	24	37	0.89	−1.58	0.64	T.	2	16	7	8	nw.	R. F. Harmon.
Ironton	Iron	925	38	50.2	−5.8	87	15	16	13	48	2.05	−0.81	1.03	T.	8	6	20	5	nw.	W. H. Delano.
Koshkonong	Oregon	958	15	53.6	−6.2	87	15	22	30	38	1.64	−1.07	0.62	0	4	17	9	5	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	48.9	−9.3	87	15	17	30	55	0.48	−2.48	0.20	T.	6	23	3	5	s.	Leonard E. Dickerson
Lockwood	Dade	1,078	21	52.6	−5.4	87	16	17	30	50	0.27	−2.70	0.27	T.	1	22	4	5	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	49.2	−8.4	84	15	18	30	45	1.78	−1.05	1.20	0	4	17	4	10	nw.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	......	......	......	......	......	......	...	......	......	......	......	...	...	...	...	......	C. L. White.
Neosho	Newton	1,011	33	52.2	−7.1	87	15†	14	30	48	0.38	−2.79	0.17	0	6	20	6	5	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	49.2	−6.0	89	15	21	30†	57	1.16	−1.28	0.55	T.	5	20	10	1	nw.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	28	50.5	−6.8	84	15	19	30	36	0.31	−2.49	0.22	T.	6	17	9	5	nw.	U. S. Weather Bureau.
Section means and extremes				50.7	−7.2	89	15	13	30	57	0.98	−1.88	2.00	T.	4	19	7	5	nw.	
Southwest Plain.																				
Amoret	Bates	831	7	51.1	−5.9	88	15†	15	30	42	0.61	−1.77	0.32	T.	4	17	4	10	nw.	Darby Fruit Farm.
Appleton City	St. Clair	8[illegible]3	25	52.0	−7.1	87	15	18	30	39	0.77	−1.60	0.25	T.	7	15	10	6	nw.	W. G. Bigelow.
Clinton	Henry	765	29	50.9	−7.5	86	15†	19	30	41	1.22	−1.45	0.10	0	5	17	6	8	nw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	43	48.0	−8.0	91	4†	17	30	46	1.36	−1.19	0.65	0.5	6	14	3	14	nw.	A. J. Sharp.
Lamar	Barton	989	35	53.2	−5.6	91	15†	16	30	43	0.29	−2.61	0.15	0	2	18	1	12	nw.	Joe W. Springer
Lamonte	Pettis	863	27	50.0	−8.2	85	15	20	30	46	1.40	−0.83	0.50	T.	6	11	8	12	nw.	J. Ed. Hall.
Marshall	Saline	779	25	49.0[b]	−7.6	83	15†	19	13†	46	1.16	−1.44	0.51	T.	7	10	14	7	nw.	Dr. W. H. Black.
Nevada	Vernon	860	22	53.5	−3.3	85	16	18	30	40	0.64	−2.33	0.28	T.	3	19	6	6	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	51.4	−6.8	86	15	19	30	40	0.98	−1.59	0.29	T.	6	12	13	6	nw.	Geo. H. Collins.
Warsaw	Benton	715	11	52.4	−6.7	91	2	17	24	52	0.99	−2.04	0.25	T.	7	15	13	3	w.	J. R. Smith, M. D.
Section means and extremes				51.2	−6.7	91	2†	15	30	52	0.94	−1.68	0.65	T.	5	15	8	8	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	50.8	−7.7	85	15	17	30	36	1.65	−1.47	1.00	T.	3	17	9	5	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	46.8	−7.5	80	2†	15	30	49	1.13	−1.11	0.40	0.5	5	11	9	11	nw.	M. H. Moulton.
Chillicothe	Livingston	768	..	47.0	−12.3	83	4	16	30	52	0.98	....	0.90	0.2	4	19	0	11	sw.	Dr. J. R. Campbell.
Conception	Nodaway	982	31	47.4	−8.0	80	14	16	30	37	1.30	−1.20	0.80	T.	5	11	12	8	nw.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	16	......	......	......	......	......	......	...	1.74	−0.87	0.80	1.0	8	16	10	5	nw	Robert R. Wynne, Jr.
Grant City	Worth	1,134	23	48.0	−7.2	81	4	15	30	57	0.14	−2.37	0.23	T.	2	19	3	9	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	50.4	−5.4	83	4	21	30	32	1.65	−0.56	0.93	0.8	9	17	8	6	nw.	U. S. Weather Bureau.
Kidder	Caldwell	1,020	25	49.9	−6.3	81	15	18	30	32	1.60	−1.17	1.15	1.2	5	21	3	7	nw.	J. F. Sharp.
Lexington	Lafayette	688	31	48.6	−9.0	85	4	21	30	38	1.57	−1.09	0.70	0.5	5	21	0	10	s.	J. W. Keithley.
Liberty	Clay	864	27	50.7[c]	−6.7	86	16†	18	30	41	2.48	+0.05	1.20	1.0	5	15[c]	6[c]	7[c]	n.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	44.8	−8.4	81	14	12	30†	49	0.97	−1.91	0.15	1.0	4	18	6	7	nw.	J. R. Brink.
Oregon	Holt	1,048	60	46.8	−8.1	77	4†	15	30	35	0.83	−1.77	0.44	0.6	4	12	12	7	nw.	Tom Curry.
St. Joseph	Buchanan	967	44	48.4	......	81	15	20	30	38	0.80	−1.82	0.47	0.3	5	12	11	8	nw	U. S. Weather Bureau.
Tarkio	Atchison	976	4	47.6	−7.9	81	14	14	30	43	0.95	−1.60	0.57	1.0	5	18	5	8	nw.	John F. Frazier.
Trenton	Grundy	822	21	47.9	−8.6	76	4	18	30	34	1.85	−0.69	1.21	T.	4	15	8	8	sw.	W. H. Estes.
Section means and extremes				48.2	−7.9	86	16†	12	30†	56	1.33	−1.26	1.21	0.5	5	16	7	8	nw.	
State means and extremes				49.8	−7.4	93	16	12	30†	57	1.16	−1.49	2.00	0.2	6	16	8	7	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. **Received too late to be included in means and summaries. ‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for October, 1917.

s.	Watersheds.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Plain.																																	
	Missouri												T.						.57				.08	.18			.32	.09		T.	T.		1.24
	Grand																	.05	.57				.05	.04			.50	.10			.04		1.35
	Chariton											.03							.16		.05		.04			.09	.27	.06					1.00
	Missouri		T.									.01						.04	.06		.12		.20	.01		.16	.05	.07					0.72
	do											.04						.76			.08		.08	.05		.11				T.			1.12
	do		.04									.02							.22		.10		.27	.04		.33	.07	.11		.04	.01		1.25
	Meramec												.07						.11			.12		.14	.05		.05	.06	T.	.40	T.		1.00
	Mississippi		.20									.05						.05	.50				.06	.03		.45	.10			.07			1.51
	do		.01							T.		.09						.11	.15		T.		.08	.02		.36	.06	.04	T.	.02	T.		0.94
	Missouri		T.										T						.04	T.		.14		.31			.20	.01		.15	T.		0.85
	do																		.02			.15		.20			.16	.03					0.56
	Chariton											.05							.52		.06			.02			.10						0.75
	Mississippi		.08																.29				T			.12	.67	.05		.21			1.42
	do																		.50	.16			.12	.02		.50	.17			.12			1.59
	Chariton		T.							T.								.57	T.			.02		.05			.32	.04			T.		1.00
	Mississippi																		.58					.20			.30						1.08
	Meramec											.03							.09		.20		.17	T.		T.	.06	.05		.37			0.97
	do												.02						.08			.12		.16	T.		.04	.05	T.	.50	T		0.97
	Mississippi												.08					T.	.35					.04			.47	.07			.02		1.03
	Grand		.01									.04							.35				.01	.01		.03	.60	.08		T.			1.13
	Missouri											T.								.62	.10		T.	.45						.39			1.56
	Mississippi			T.								.08						T.	.26		.07		.09	.03		.13	.01	.07	.84	.29			1.87
	do											.08						.03	.27		.06		.14	.01		.08	.01	.09	.48	.26			1.51
	do																		.65								.26	.06					0.97
	do		T.							T								.05	.40				.05	.10		.15		.25		.05	T.		1.05
	Meramec												.03						.40			.17		.15			.05	.02		.44			1.26
	Grand												T.					.04	.55					T			1.20	.15		T.	.04		1.98
	Meramec				T.								.07						.10	.06		.14		.13	T.		.05	.03	.04	.57	T.		1.19
	Mississippi																		.40			.11	T	.32			.09	.01		.07	T.		1.00
**	do		.11							T.		.04					.01	.38	.62				.05	T.		.38	.02	.12	.16	.04			1.93
lands.																																	
	Mississippi			T.				T.	T										T.	.12							.15	.25		1.01			1.53
	Black			T.					.20				T						.02	.17						T.	.35	.02		.80			1.56
	Mississippi			.01															.81							.45				.48			1.75
	do																										.40			.50			0.90
	do				T.				.10				T.						.01	.11						.27		.06			.95		1.50
	do			.30															.90								.30			1.00			2.50
	Black				T.				.05			T.	.04						T	.16							.36	.03		.13	.32		1.09
	Mississippi																																......
	do		T.	.18				T.				.01						T.	.25				T		.25		.01	T.	.72				1.42
.																																	
	Gasconade			.03															.15			T.		.20			.15	T.		.35	T.		0.88
	Black																		.25								.16			.70			1.11
	Osage																	.08			.09		.03						.10				0.30
	White																																......
	Gasconade																										.04						0.04
	Neosho			.02															.31							.02				.64			0.99
	Osage																		.02		.18		.12			.03	.01	.03					0.39
	Black								.10																					2.00			2.10
	Meramec			.10				T.											.15		T.	.04	T.	.03			.17			1.30			1.79
	Black			.15															.56									.23		.30			1.24
	White			.20					.15																			.45					0.80
	Gasconade			.25															T.				T.			T.				.64			0.89
	Mississippi			.20	T.								T.						.05	.25		T.		.05			.35	T.	.02	1.03	.10		2.05
	Black			T.					.11										.62							.62				.29			1.64
	Osage								T.										.05	T.	.10			.05			.05	.03		.20	T.		0.48
	do																				.27									T.			0.27
	White			.14															.06	T.							.38			1.20			1.78
	Neosho																																......
	do		T.	.05					.08										.17			.05					.03			T.			0.38
	Meramec																		T.			.55		.14			.04	.03		.40			1.16
	White		T.	T.				T.										.04	.01		.01		T			.03			.13	.09			0.31
	Meramec																																......
	Osage																		.02			.17		.10			.01	.02		.18			0.53
ern.																																	
	Osage																	T.		T	.32		.02				.05	.22					0.61
	do																	.01	.25		.24		.03			.03	.16	.05		T.			0.77
	do																		.35		.22		.10				.40	.15					1.22
	do																		.22			.18		.08			.65	.18		.05			1.36
	Neosho																					.15					.14						0.29
	Missouri											T.							.10		.20		.50	T		.05	.35	.20		T.			1.40
	do											.02							.51		.15		.12	T		.10	.25			.01			1.16
	Osage																		.20		.28						.16			T.			0.64
	do																		.02			.29		.08			.16	.03					0.58
	Missouri											T.							.18		.15		.16			.18		.29		.02			0.98
	Osage																		.25		.18		.11			.03	.20	.08		.14			0.99
	Missouri												T.						.58			.05	.05	.05			.64	.22		T	.02		1.61
lateau.																																	
	Grand																		.50							1.00		.15					1.65
	do											T						.10	.35				T.	T.		.23	.40	.05					1.13
	do																		.02								.90	.05		.01			0.98
	Missouri	T.										T.						.05	.80							.34	.06	.05					1.30
	Grand		T.									T						.06	.50				.02	.03		.15	.80	.10		.08			1.74
	do	T.																T		.23			T.	T.			.21	T.					0.44
	Missouri		.01									T.						.30	.06		.05		.10			.93	.07	.05		.08			1.65
	Grand																		.25								1.15	.13		.05	.02		1.60
	Missouri			.02															.50			.09		T.			.70	.20		T.	.06		1.57
	do																		.98				T.			.20	1.00	.20	.10				2.48
	do																		.45								.39	.03		.10			0.97
	do	T.																.25					T.			.44	.08			.06			0.83
	do											T.					T.	.23	T.				T.	T.		.17	.05	.01	T.	.04			0.50
	do	.01																T	.21			T				.57		.06			.10		0.95
	Grand	T										T.					T		.52				.06			1.21				.06			1.85

s otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the vation. Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. eather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate ot recorded.

Daily temperatures for October, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	73	78	80	83	60	67	65	54	68	60	64	51	66	76	86	71	83	83	50	46	54	45	49	53	48	54	53	71	32	41
	Minimum	48	59	59	47	48	35	35	30	32	43	40	29	26	28	47	52	53	49	29	40	34	34	27	39	32	39	36	48	24	26
Columbia	Maximum	72	79	79	81	61	65	66	50	66	55	61	48	65	76	84	70	83	68	47	46	52	47	38	50	52	53	51	71	40	40
	Minimum	41	59	55	48	38	32	44	32	32	38	36	28	23	51	53	52	64	34	29	32	25	31	27	24	37	41	38	39	[illegible]	20
Fayette	Maximum	74	77	81	84	58	67	66	53	65	56	63	50	65	74	84	70	83	50	47	43	50	45	39	50	50	54	52	69	46	39
	Minimum	43	57	55	47	40	33	45	31	33	38	35	29	22	48	47	52	63	37	30	32	25	31	25	22	34	39	36	39	23	19
Hannibal	Maximum	71	78	79	79	59	63	64	50	62	49	59	47	61	72	79	66	84	67	47	48	49	48	42	48	51	53	51	67	41	40
	Minimum	38	57	53	45	39	33	46	32	34	35	34	28	22	51	46	49	58	38	33	37	28	32	28	25	35	41	40	38	27	22
Jefferson City §§	Maximum	75	80	81	83	62	67	67	53	67	56	60	52	66	79	88	73	85	54	51	50	53	50	38	53	53	54	54	71	57	43
	Minimum	41	41	58	48	49	33	41	31	31	39	37	30	21	26	51	54	54	54	29	30	27	33	26	22	28	38	40	35	31	20
Kirksville	Maximum	72	76	72	78	71	63	63	52	65	60	60	48	61	71	80	67	80	69	46	48	48	48	46	51	45	52	50	63	51	40
	Minimum	40	52	57	43	44	31	43	27	36	38	34	25	24	47	44	44	52	36	26	32	24	30	25	23	32	37	31	33	24	16
Louisiana	Maximum	62	77	72	77	68	58	65	64	50	40	48	47	48	75	75	76	82	76	69	40	48	49	43	43	46	45	45	65	60	42
	Minimum	32	54	58	44	46	28	41	33	25	32	25	30	15	40	42	42	45	41	32	32	33	37	27	22	33	44	40	26	32	28
Macon §§	Maximum	74	78	78	80	56	65	65	52	65	56	60	48	63	73	85	66	83	53	46	48	51	47	45	57	49	54	51	72	53	42
	Minimum	37	38	55	43	43	32	34	27	28	39	32	26	23	26	44	45	49	48	28	27	25	34	23	23	28	34	34	31	28	18
Mexico §§	Maximum	75	81	79	82	59	66	67	53	64	51	52	49	64	75	85	71	85	66	49	48	53	46	39	52	50	53	53	69	54	43
	Minimum	36	38	59	44	41	30	31	29	30	38	35	28	20	48	50	47	48	58	30	31	27	33	25	22	23	35	30	34	[illegible]	20
Oakfield	Maximum	72	80	75	81	68	65	68	57	54	54	55	51	65	77	88	71	86	78	51	55	55	51	39	47	54	54	54	66	60	43
	Minimum	42	51	60	48	46	36	46	33	30	41	34	29	23	47	58	53	60	45	32	31	28	35	26	29	35	39	40	30	30	19
St. Catharine	Maximum	72	77	79	80	68	64	64	52	66	62	60	48	61	72	81	71	80	77	47	48	51	49	45	49	46	53	51	63	53	40
	Minimum	42	56	62	44	45	31	44	28	35	40	37	25	21	47	41	49	58	47	36	33	24	34	24	23	34	38	32	58	21	17
St. Louis (1)	Maximum	69	77	74	79	64	63	67	52	61	52	52	51	61	73	85	72	83	74	50	56	51	52	42	46	54	53	54	65	60	41
	Minimum	48	51	56	54	47	44	51	38	38	42	38	33	33	47	59	55	60	40	36	36	35	35	29	36	36	42	43	39	28	25
Unionville §§	Maximum	74	78	74	80	60	66	60	54	66	62	58	46	64	74	80	70	75	48	46	48	46	44	45	50	46	50	52	60	30	40
	Minimum	38	40	50	42	41	32	34	25	26	36	40	24	22	22	42	40	42	41	24	25	24	25	24	22	24	33	33	34	25	15
Warrenton §§	Maximum	74	79	78	82	58	65	67	51	64	53	54	49	61	77	86	71	84	69	47	51	50	44	39	47	[illegible]	54	73	58	52	41
	Minimum	43	50	52	47	48	36	45	31	34	41	33	28	27	36	55	50	53	60	31	29	27	30	24	27	33	38	33	35	30	19
Southeast Lowlands.																															
Caruthersville	Maximum	83	86	83	88	80	80	80	72	72	74	78	67	74	80	87	93	92	87	62	71	65	73	58	58	68	68	69	82	73	48
	Minimum	44	48	57	58	55	43	44	50	34	40	39	36	30	44	53	52	60	58	37	30	34	36	33	37	37	47	49	44	37	26
Doniphan	Maximum	75	78	79	80	71	66	75	66	63	64	61	57	65	78	84	84	84	80	55	66	56	67	57	51	61	61	62	75	71	44
	Minimum	40	38	53	50	55	35	40	35	27	34	34	32	24	44	55	50	53	54	33	25	30	41	32	25	33	45	46	34	34	22
Jackson	Maximum	75	78	80	80	69	66	79	64	66	58	63	56	63	80	89	89	88	80	52	61	56	69	48	44	59	60	58	70	50	48
	Minimum	32	41	58	45	50	30	40	41	22	31	25	28	17	36	55	49	55	50	35	25	29	32	29	38	30	45	45	31	34	23
Marble Hill	Maximum	78	73	77	82	80	65	79	67	64	67	64	59	65	78	87	83	85	80	73	64	70	68	54	45	64	60	60	79	70	45
	Minimum	44	37	60	46	51	35	41	44	25	40	29	31	21	40	56	53	55	32	35	39	31	36	30	35	30	45	45	35	30	22
Poplar Bluff §§	Maximum	73	79	79	83	73	66	77	59	64	67	65	60	67	82	87	85	87	82	59	68	61	70	44	56	66	65	67	74	45	48
	Minimum	40	41	46	47	48	35	36	39	27	28	32	29	23	28	46	49	49	53	31	23	28	31	29	26	30	33	43	51	41	20
Ozark Plateau.																															
Birchtree	Maximum	76	78	80	....	56	....	76	65	63	60	65	55	64	....	87	82	83	76	62	64	58	65	45	55	55	61	59	55	56	44
	Minimum	41	48	54	....	34	....	50	40	28	42	38	31	27	....	54	53	56	47	28	27	27	36	30	23	35	41	43	42	50	21
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	72	78	80	83	70	66	67	56	67	57	59	51	57	79	87	77	83	67	53	44	55	50	36	36	54	58	55	75	62	56
	Minimum	40	56	56	45	45	30	43	29	43	35	38	27	24	44	53	50	60	39	25	37	23	31	25	24	33	36	38	34	25	17
Fruit City	Maximum	72	76	76	81	74	77	76	61	64	64	56	55	69	78	88	87	76	80	74	65	57	47	45	47	56	62	59	55	67	44
	Minimum	43	52	56	40	36	41	40	40	41	36	30	30	26	45	56	57	50	47	38	29	28	38	28	25	39	49	43	37	30	20
Gano	Maximum	73	76	77	80	69	65	66	54	59	51	54	51	67	79	88	83	81	77	47	52	54	57	37	55	54	58	55	64	60	40
	Minimum	36	52	47	46	47	30	44	38	24	38	32	27	21	49	56	53	63	45	26	26	25	35	25	22	34	37	39	33	27	29
Hollister	Maximum	76	80	82	84	70	72	70	66	67	66	68	48	70	82	84	8	84	62	56	65	60	50	56	60	60	62	64	74	52	48
	Minimum	42	54	60	48	54	34	34	40	30	40	42	36	28	46	62	60	58	56	28	28	34	36	30	24	42	40	42	40	38	20
Ironton §§	Maximum	72	76	77	80	66	64	73	56	62	55	57	53	64	75	87	81	85	74	82	61	54	65	45	50	57	60	57	68	52	44
	Minimum	32	43	53	43	50	30	44	38	21	40	25	30	16	35	54	48	59	60	51	21	24	31	28	25	30	40	41	24	35	17
Koshkonong	Maximum	75	80	78	81	70	67	73	65	63	64	68	58	65	79	87	86	84	75	51	65	68	67	50	56	58	61	60	72	69	45
	Minimum	46	51	57	50	53	37	45	42	31	43	40	31	31	46	54	53	59	46	28	31	30	36	30	26	35	42	43	36	31	22
Lebanon §§	Maximum	72	75	78	80	63	64	62	50	55	57	58	52	66	80	87	83	83	69	58	53	59	55	50	55	56	58	70	77	31	42
	Minimum	42	45	56	45	46	30	31	32	26	32	36	28	25	25	57	52	54	61	25	25	28	31	28	21	30	25	38	40	29	17
Mountain Grove §§	Maximum	70	73	78	79	63	64	70	52	60	59	62	51	64	78	84	82	81	67	51	59	57	51	45	58	55	64	57	70	32	44
	Minimum	44	52	54	45	54	30	34	37	25	31	37	28	26	33	50	54	55	57	34	25	26	27	26	22	24	34	37	38	32	18
Neosho	Maximum	76	75	81	84	78	71	70	57	68	65	66	59	70	82	87	87	82	74	53	57	59	60	48	60	60	60	60	79	76	48
	Minimum	40	56	56	42	46	30	42	38	25	31	38	27	24	45	56	52	59	43	25	32	27	32	28	20	40	36	35	31	28	14
Rolla §§	Maximum	77	76	79	82	70	67	65	54	66	58	55	52	69	82	89	83	84	70	52	53	57	55	36	58	53	59	56	71	32	41
	Minimum	42	43	55	47	47	32	32	33	28	34	35	28	25	25	55	55	55	61	28	28	29	30	27	24	24	38	39	34	31	21
Springfield	Maximum	70	74	78	80	65	63	65	49	64	58	61	50	63	79	84	83	80	66	49	53	53	53	45	53	54	54	55	76	40	42
	Minimum	50	56	57	51	43	39	49	36	32	41	39	29	33	53	60	58	61	35	26	32	27	32	29	25	41	38	40	40	25	19
Southwest Plain.																															
Amoret	Maximum	76	78	78	86	76	69	64	57	75	70	66	55	68	82	88	88	80	65	52	50	65	55	49	55	55	60	55	72	65	45
	Minimum	41	45	46	47	47	33	44	28	33	35	35	26	26	50	51	54	52	40	22	32	32	25	30	24	36	39	33	37	26	15
Appleton City	Maximum	74	80	81	85	75	68	64	56	70	65	64	56	68	80	87	79	81	69	50	46	55	51	49	56	55	56	56	75	64	43
	Minimum	48	58	59	49	51	35	45	32	34	38	41	28	29	51	55	55	63	43	25	35	28	36	31	25	41	36	36	40	29	18
Clinton	Maximum	76	79	81	82	65	70	67	65	70	71	64	55	67	80	86	77	86	75	51	50	56	51	47	58	51	57	59	77	30	42
	Minimum	44	57	53	47	48	35	37	30	32	31	40	28	26	50	52	54	60	42	25	31	25	35	31	23	38	37	32	36	29	19
Harrisonville §§	Maximum	73	77	78	91	62	68	65	51	72	58	65	53	67	85	91	71	78	50	51	45	55	47	46	55	52	55	54	70	32	41
	Minimum	45	52	57	45	49	32	36	31	31	36	37	27	25	36	45	54	53	46	24	26	22	23	30	26	26	36	34	33	27	17
Lamar §§	Maximum	77	84	83	87	70	72	65	58	72	67	64	57	72	84	91	91	85	56	55	54	60	56	52	59	56	59	71	81	38	46
	Minimum	45	58	59	45	51	33	46	35	29	37	41	27	28	52	54	57	65	50	25	39	28	37	30	24	41	36	40	41	29	16
Lamonte	Maximum	74	78	80	82	70	67	65	56	70	63	63	52	67	78	85	74	84	66	50	44	54	55	45	56	54	52	54	71	56	46
	Minimum	40	59	58	44	47	29	44	31	30	36	37	28	21	50	45	51	64	40	25	35	25	35	28	24	35	36	45	35	28	20
Marshall	Maximum	71	79	79	82	60	65	63	59	67	60	64	57	65	76	83	72	83	74	60	45	54	52	43	52	49	54	53	71	62	41
	Minimum	43	53	57	....	45	32	47	30	35	37	37	28	19	47	45	49	59	26	25	35	24	33	25	22	35	39	34	33	23	19
Warrensburg	Maximum	76	78	80	84	72	70	67	55	72	63	65	52	69	78	86	73	85	69	53	44	57	52	48	59	53	54	56	72	56	43
	Minimum	47	57	62	50	48	35	46	31	36	39	40	28	29	50	55	51	62	40	25	36	28	32	30	27	36	39	35	36	27	19
Warsaw	Maximum	76	91	87	89	80	72	77	59	70	68	70	60	71	80	90	86	87	76	62	49	65	52	54	64	58	62	65	70	56	50
	Minimum	38	56	54	42	41	39	39	28	26	34	34	27	19	38	45	52	60	42	23	25	30	37	30	17	36	38	40	31	29	18
Northwest Plateau.																															
Chillicothe §§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grant City	Maximum	71	80	78	81	70	67	67	54	72	52	56	49	55	80	71	69	72	69	65	50	55	53	46	53	45	54	52	60	41	48
	Minimum	45	63	59	45	45	32	50	25	39	39	41	19	24	24	45	46	53	36	22	32	23	35	26	24	36	36	27	40	25	15
Kansas City	Maximum	71	79	78	83	61	66	63	52	73	56	61	51	66	78	83	67	76	59	50	49	55	52	47	53	49	53	52	64	32	42
	Minimum	53	60	58	54	46	41	45	34	42	41	37	30	36	55	58	52	59	34	29	38	31	34	32	31	38	36	36	32	26	21
Kidder §§	Maximum	78	72	76	80	57	67	63	57	72	57	68	49	63	75	81	69	75	52	47	56	56	54	46	52	46	53	50	64	32	35
	Minimum	46	56	62	51	55	36	59	29	43	40	43	26	31	52	52	49	66	45	26	41	28	42	29	26	36	38	33	39	26	18
Lexington §§	Maximum	76	79	78	85	60	67	64	51	70	60	64	51	64	75	84	71	80	57	49	46	51	47	47	54	47	54	53	68	41	40
	Minimum	47	57	61	50	48	34	47	30	37	39	41	29	26	50	52	50	60	47	27	32	29	26	30	26	37	39	33	37	28	21
Maryville §§	Maximum	72	80	80	79	56	66	60	50	70	59	55	51	67	81	78	71	74	43	48	50	58	40	47	53	48	54	53	59	28	37
	Minimum	42	43	50	46	44	32	34	23	23	35	35	22	23	32	42	44	48	40	20	20	23	30	28	25	25	33	26	27	23	12
Oregon	Maximum	71	75	73	77	66	64	60	50	71	54	60	45	63	71	77	66	72	69	48	49	58	55	44	50	48	46	50	58	34	39
	Minimum	49	55	56	48	43	35	44	26	38	34	37	24	29	48	49	47	52	34	20	31	26	33	25	26	35	30	25	30	23	15
St. Joseph	Maximum	73	78	75	80	60	68	60	52	73	57	59	50	66	78	81	65	73	53	49	50	58	51	46	52	46	52	51	60	31	40
	Minimum	51	58	53	52	39	38	42	30	45	38	31	28	28	53	51	51	53	35	25	33	30	34	29	31	38	35	33	31	27	20
Trenton	Maximum	69	72	72	76	72	64	61	58	64	59	59	50	59	69	74	71	68	62	61	50	51	48	49	45	50	51	49	51	35	38
	Minimum	45	55	58	49	48	36	45	28	40	41	40	27	26	44	46	50	55	39	27	33	27	35	27	27	35	38	34	35	26	18

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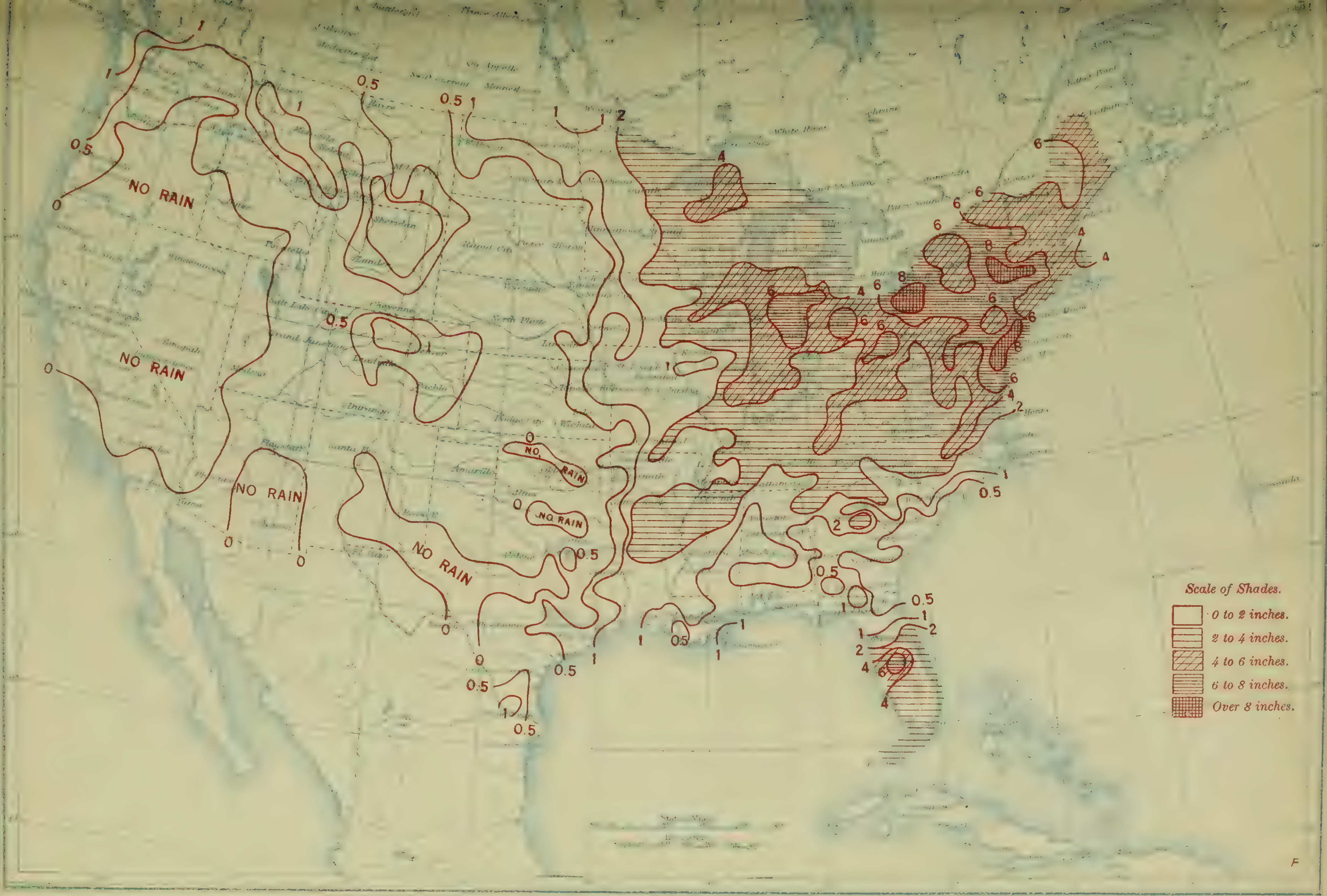
*, †, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is char the preceding day, on which it almost always occurs.


Scale of Shades.
☐ 0 to 2 inches.
▤ 2 to 4 inches.
▨ 4 to 6 inches.
▤ 6 to 8 inches.
▦ Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
Sheridan
Salt Lake City
Cheyenne
North Platte
Pueblo
Durango
Amarillo
El Paso
White River
F

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR OCTOBER, 1917, AT THE UNIVERSITY O SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 77 and 78.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau stan described in Circular L. Horizontal distance of the anemomet pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 11 feet. Distance of rain gage fr 2.6 feet. The ground in the immediate vicinity of the pan slop north, average 5 per cent grade. The soil is covered by blue gr being part of the University campus. There are no bodies of wat nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by Philip G. McGinnis, observer, Weather Bureau. This is one of the "Class A" stati signed to furnish practical information relative to evaporation. complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for October, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.128	.120	.103	.123	.129	.130	.089	.121	.081	.086	.085	.064	.062	.131	.085	.144	.147	.107	.120	.079	.025	.063	006	.000	.028	.014	059	.092	.160	*
Daily wind movement	33	34	29	22	43	50	28	46	28	43	38	78	45	29	36	41	66	62	95	44	21	29	64	49	45	73	32	45	90	105

*Total in next following measurement. † Indicates minus (−) Observations taken at 6

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	14	0.88	−1.34	0.35	...	5	22	2	7	......	Wm. R. Bennett.
Boonville	40	1.24	−1.49	0.57	...	5	21	1	9	.....	C. Randecker.
Cape Girardeau	10	....	....	....	...	..	.	.	..	......	D. L. Albert.
Glencoe	0	1.00	....	0.14	0	8	13	8	10	......	Vint R. Neel.
Hermann	43	0.85	−1.84	0.31	T.	6	12	5	14	se.	C. T. Maushund.
New Madrid	23	1.50	−1.84	0.95	0	6	17	5	9	se.	Miss Josie Smith.
Osceola	17	0.58	−1.61	0.29	0	5	15[a]	3[a]	12[a]	......	Wm. E. Mathews
Pacific	0	0.97	....	0.16	...	7	14	6	11	......	R. C. Dougherty.
Steelville	15	....	....	....	...	..	..	.	..	......	Wm. J Drennen.
Tuscumbia	0	0.53	....	0.18	...	6	18	2	11	nw.	C. B. Wright.
Union	0	1.26	....	0.44	0	7	13	10	8	.....	J. Wm. Keller.
Valley Park	0	1.19	....	0.57	T.	9	14	4	13	w.	H. J. Lucksinger.
Waverly	2	1.61	....	0.64	...	7	19	2	10	......	J. W. Cauthorn.

TORNADO NEAR SPRINGFIELD, MO.

On October 28th at 7:00 p. m. a tornado formed near the head of Clear Creek, about 8 miles west of Springfield, on the Will Bowers property. It moved in a norteasterly direction, passing about two miles south and east of Willard, reaching the Sac River near the Walnut Springs district, thence passing about halfway between Glidewell and Hackney Mills, and died out about 14 miles due north of Springfield. It cut a path about 18 miles in length, varying in width from a few rods to nearly one-half mile. Damage is estimated by the writer at $20,000, mostly covered by insurance.

Unusually warm weather prevailed throughout southwestern Missouri during the day, with brisk southerly winds from 20 to 30 miles per hour and cloudless skies from sunrise to 2:30 p. m. At Springfield the temperature rose steadily from 40° at 5:00 a. m. to 47° at 7:00 a. m., to 68° at noon and to 76° at 2:15 p. m. At about 2:30 a line of strato-cumulus clouds appeared in the west, near the horizon; by 4:15 one-half the sky was overcast with strato-cumulus clouds, deepening into stratus in the west. By 5:30 p. m. the sky was covered with strato-cumulus moving from the southwest, with lower stratus clouds moving from the north and east. At 6:09 p. m. cumulus-nimbus clouds appeared in the west and rain began to fall at Springfield. The first thunder was heard at 6.15 p. m. By 6 40 the temperature had dropped steadily to 69° and evidences of tornadic formation appeared in the western sky The clouds were unusually dark and seemed to be moving from all directions toward the north; heavy thunder was heard in the west with flashes of lightning. Light rain continued throughout the night.

The first damage reported was on the Will Bower farm. Here every building and outhouse was wrecked or swept away and several head of stock were killed. The next damage reported was on the farm of James Hubbard, 4 miles south of Willa Hubbard in an interview with the writer said: "The first I heard of the tor at about 6:58 p. m. when I heard a sort of a wild, shrieking sound above the of the wind; it was like a locomotive whistle right in your ears. I rushed to and saw the sky filled with inky clouds all rushing together, and where they was a long cloud like a pencil coming right down to the ground, almost hitti then bouncing up again as high as thirty feet. It was moving toward the and corn-stalks, branches and boards were flying with the cloud. Rain was fa there was heavy thunder and much lightning. I don't know whether there hail or not; there might have been. The tornado came through a small grove, and uprooting the trees. Hundreds of bushels of shocked corn in my fields tered all over the neighborhood."

From the Hubbard farm the tornado moved to the farm of Solon Wright, one-half miles south of Willard. His barn and hog-house were demolished, killed, several injured, together with hogs and cows. Every outbuilding w over. The garage was wrecked and by a freak of the storm the top was rippe Ford car, leaving the car uninjured. A large steel windmill was twisted around (showing the twisting nature of the pendant cloud) and hurled ag house, breaking a part of the roof.

To the east of Willard many buildings were demolished.

The church at Walnut Springs, three miles northeast of the Wright farm, w in the air and hurled from its foundation to the ground. Mr. Graves, a farn Hackney Mills, sustained slight injuries from flying debris.

Only meager reports were obtainable from the country north of Elwood.

W. B. HARE, Observer, Springfield.

1.02
MS

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

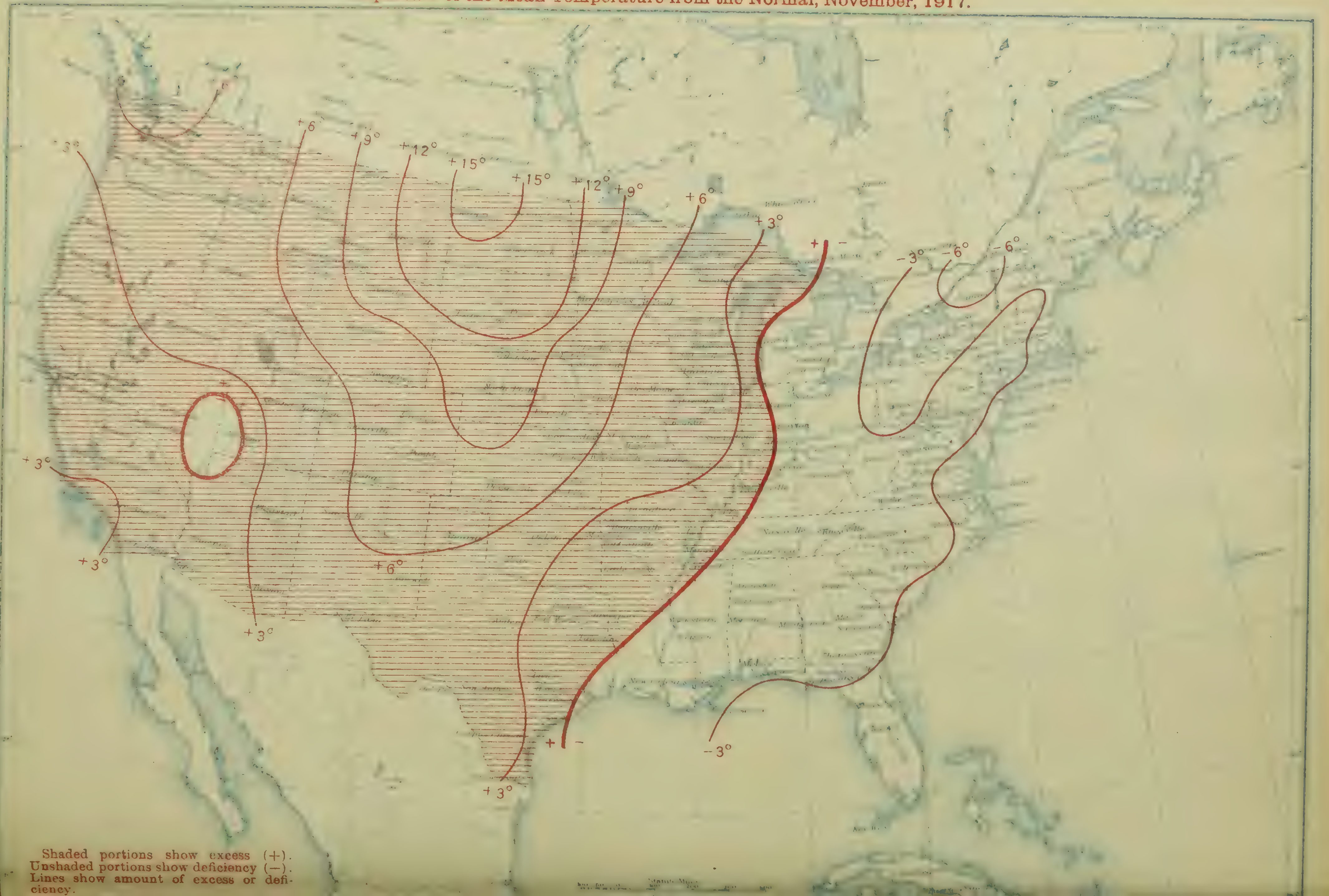
NOVEMBER, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
DECEMBER 21, 1917.

Departure of the Mean Temperature from the Normal, November, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XI. COLUMBIA, MO., NOVEMBER, 1917. No. 11.

GENERAL SUMMARY.

mber, 1917, was a mild and pleasant month in Mis- It was unusually dry and consequently was favorable t outdoor occupations. As compared with Novembers of ears, considering the State as a whole, it ranks about driest since 1867. If we consider, however, all of that the State north of the Ozarks, and excluding the latter, mber in the past 50 years experienced so light precipi- s the present month.

about the 4th to the 22d, the weather was exception- e, save, perhaps, dense fog during several mornings. s not only favorable for building operations; but it al- st of the frosted corn to cure on the stalk and in gen- ome usable for feeding purposes. It also resulted in road conditions.

veather was rather too dry for perfect germination of n wheat and rye; but the early sown came up well and air condition at the close of the month. Corn cribbing general. In southern sections corn, before the fine the 26th, 27th, and 28th, was too dry for handling, and orthern sections there was much sappy corn, notwith- the fact the weather was ideal for drying out. October, ther hand, we should remember, was too cold for fast tion and drying out. Stock was in fair to good condi- t water was getting scarce.

TEMPERATURE.

nonthly mean for the State, as shown by the records of ns, was 46.1°. The departure from the normal for 57 having 10 or more years' record was plus 1.5.° During 30 years thirteen Novembers have been milder than the month. The first two or three days of the month and 23d to the 30th were somewhat colder than usual, but ainder of the month, except a day or two at a time, rkedly mild. On the 4th maximum temperatures etween 75° and 80° generally. The coldest weather during the last six days, the 24th being the coldest en minima ranged from about 8° to 9° above zero in sections to 14° above in the southeastern lowland. Min- mperatures were 32° or lower on an average of 12 days; the distribution was noticeably uniform, southern sta- ving about the same number of days with freezing ture as the northern stations.

PRECIPITATION.

erage precipitation, 85 stations reporting, was 1.05 inches. The from the normal for 73 stations having 10 or more years' rec- minus 1.46 inches. In most of the central and northern coun- onth was among the driest on record. North of the Osage and the northern half of the State the monthly precipitation was less half inch. The southwestern plain, northwestern plateau, and tern plain received an average of about 0.20 inch, or only about nt of the normal amount. At 9 stations the total monthly fall tically inappreciable; 24 stations had more than 0.01 inch but 0.20 inch, and 47 less than 0.50 inch. Along the southern Ozark precipitation was somewhat above normal, practically all of it n the 26th, 27th, and 28th. The heaviest monthly amount was hes, at Hollister. The greatest amount in any 24 consecutive as 3.26 inches, at Dean, McDonald County, on the 27th.

snowfall was light and unimportant.

average number of days with 0.01 inch or more precipitation r about 5 below normal.

EVAPORATION.

At Columbia, Mo., the total evaporation for the month from standard free exposure was 1.50 inches. (See Daily Evaporation on page 88.) The total precipitation was 0.10 inch; the wind movement over the surface of the pan, 1.154 miles; the mean temperature, 45.4°, and the percentage of sunshine, 54. During the same month in 1916, these data were, in order named, 1.54 inches; 2.21 inches; 1,688 miles; 45.8°, and 68 per cent.

WIND.

The prevailing winds were from the south. The average monthly wind movement, 8 stations equipped with anemometers reporting, was 5,756 miles, or an average hourly velocity of 8.0 miles. This is about 12 per cent below normal. There were no high winds, except on the 21st.

SUNSHINE AND CLOUDINESS.

The number of clear, partly cloudy, and cloudy days differed but little from the average. The average number of hours of sunshine was 164, or about 54 per cent of the possible, and 3 per cent below normal.

MISCELLANEOUS PHENOMENA.

Fogs, dense---8th, 9th, 12th, 13th, 15th, 27th, 28th, 29th, and 30th. Halos, lunar---1st, 2d, 27th, 28th, and 29th. Halos, solar---3d, 18th, and 21st. Sleet---26th. Thunder was heard on the 10th, 11th, 26th, and 27th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.20	75	......	167	55	4,779	6.6	38	nw.	21
Hannibal	30.21	78	......	......	......	5,403	7.5	28	nw.	21
Kansas City	30.19	67	56	189	63	7,431	10.3	66	n.	21
St. Joseph	30.20	73	56	165	55	4,959	6.9	54	nw.	21
St. Louis	30.20	69	63	144	48	7,427	10.3	37	w.	21
Springfield	30.21	74	54	169	55	6,398	8.9	38	nw.	22
Cairo, Ill	30.20	77	62	......	......	5,194	7.2	28	n.	22
Keokuk, Iowa	30.22	80	63	132	49	4,461	6.2	28	nw.	21

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	41.6	−2.0	87	15	3.26	+0.94	......	......	11	....	....	....
1889	39.9	−3.7	73	8	3.43	+1.11	......	......	7	....	....	....
1890	46.5	+2.9	80	20	2.31	−0.01	......	......	5	....	....	....
1891	39.6	−4.0	82	− 2	3.60	+1.28	......	......	5	....	....	....
1892	40.1	−3.5	79	9	2.60	+0.28	......	1.0	6	11	7	12
1893	40.9	−2.7	79	− 1	1.59	−0.73	4.86	0.3	4	14	9	7
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	−1.3	82	5	2.18	−0.14	4.00	0.2	6	11	7	12
1897	43.4	−0.2	82	− 3	2.40	+0.08	3.39	T.	6	13	8	9
1898	39.9	−3.7	79	− 8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+0.1	84	7	2.58	+0.26	4.55	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+6.5	85	18	3.52	+1.20	2.14	0.4	9	8	9	13
1903	40.9	−2.7	79	2	1.24	−1.08	2.44	1.1	5	13	8	9
1904	46.3	+2.7	83	11	0.22	−2.10	0.68	T.	2	21	5	4
1905	45.8	+2.2	83	2	1.94	−0.38	2.49	T.	6	18	6	6
1906	42.5	−1.1	88	− 3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+4.0	87	9	4.14	+1.82	4.00	0.2	8	15	7	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	−4.5	93	− 3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	48.6	+4.0	89	2	0.65	−1.84	1.90	0.1	3	19	6	5
1915	49.5	+4.9	87	12	2.76	+0.33	2.62	0.1	5	16	7	7
1916	49.6	+1.9	85	3	2.49	+0.14	2.53	0.1	4	19	4	7
1917	46.1	+1.5	80	8	1.05	−1.46	3.26	T.	3	14	5	11

Climatological data for November, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days				Prevailing direction of wind.	Observer
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., 0.01 or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	36	45.9	+4.7	79	6	11	25	41	T	-1.92	T	0	0	17	0	13	n.	Louis Benecke.
Clifton Hill	Randolph	731		46.0	+2.3	75	4	11	21	37	0.14	-1.59	0.14	0	2	16	6	8		L. S. Harlan.
Columbia	Boone	784	26	45.4	+3.0	75	4	13	21	37	0.10	-2.21	0.06	T.	1	13	3	14	n.	U. S. Weather B
Fayette	Howard	725	31	44.2	+1.6	75	4	13	21	36	0.05	-1.99	0.04	0	2					Prof. T. B. Scott
Fulton	Callaway	818	12	44.2	0.3	77	7	9	21	50	0.19	-2.21	0.13	0	1	20	2	8	sw.	Dr. O. M. Weig
Gorin	Scotland	700	27								0.21	-1.76	0.21	0	1	14	3	13	sw.	J. W. Pelham.
Hannibal	Marion	534	23	44.5	+4.0	75	7	13	21	34	0.08	-1.87	0.06	T.	3	14	2	14	sw.	U. S. Weather Bu
Jefferson City	Cole	557	30	44.9	+0.5	71	7†	14	21	39	0.31	-1.96	0.30	0	2	16	5	9	n.	Miss [illegible]
Keytesville	Chariton	660	3								0.01		0.01	0	1					J. T. Dewey, M
Kirksville	Adair	969	24	44.8	+4.5	75	7	13	24	37	0.02	-1.73	0.02	0	1	13	10	7	s.	Prof. Mark Bur
Louisiana	Pike	469	38	42.4[a]	-1.7	73	4†	9	21	44	0.23	-1.93	0.19	0.2	3	15[a]	4[a]	10[a]	ne.	J. T. Farrell.
Macon	Macon	875	18																	
Mexico	Audrain	797	38	44.4	+1.3	75	9	11	24	51	T	-2.40	T	0	0	18	0	12	s.	R. M. Llewellyn.
Oakfield	Franklin	793	35	47.0	+0.8	76	7	16	24	40	0.91	-1.70	0.31	T.	4	12	6	12	s.	E. L. Stennes.
Palmyra	Marion	652	4	42.6	-0.5	73	7	11	24	39	0.08	-2.26	0.03	0	4	14	13	3	sw.	W. B. Markell.
St. Catherine	Linn	850	3	44.6		71	7	12	24	35	0.05		0.05	0	1	13	9	8	sw.	L. D. Baker.
St. Charles	St. Charles	456	38	46.4	+1.1	78	7	13	21	38	0.50	-2.15	0.30	0	3	14	5	11	n.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	47.7	+4.3	71	7	24	21	32	0.78	-2.10	0.42	0	5	11	6	13	nw.	U. S. Weather Bu
St. Louis (2)	do	578	4	46.2		73	7	21	24	32	0.89		0.32	0.1	7	9	8	13	n.	St. Louis Univer-
Shelbina	Shelby	779	24								0.00	-2.11	0.00	0	0					S. G. Parsons.
Steffenville	Lewis	650	23	44.2	+0.4	78	6	10	21	40	0.05	-1.83	0.05	0	1	16	5	9	w.	Frank Hall.
Unionville	Putnam	1,072	23	43.3	+3.3	74	6	12	24	38	0.08	-1.59	0.06	0	2	19	4	7	n.	Geo. W. Davis.
Warrenton	Warren	865	25	45.2	+2.3	71	7	14	24	37	0.27	-2.37	0.25	T.	2	16	5	9	s.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	574	45	44.4	+5.0	71	7	17	24	31	0.01	-1.84	0.01	T.	1	13	4	13	sw.	U. S. Weather B
Section means and extremes				44.9	+2.0	79	6	9	24	51	0.22	-1.98	0.42	T	2	15	5	10	sw.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5																	J. M. Seaborn.
Caruthersville	Pemiscott	220	25	50.6	+0.9	78	4†	23	24	45	1.48	-2.54	0.43	T	5	16	2	12	e.	H. L. Averill.
Doniphan	Ripley	344	11	46.7	-1.3	73	7†	14	24	42	2.59	-0.31	2.00	T.	6	15	4	11	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	45.0	-1.8	78	4	15	24	50	2.81	-0.68	0.85	0	7	12	12	6	s.	L. M. Bean.
Marble Hill	Bollinger	420	24	47.0	+3.1	78	7	16	21	45	3.08	-0.13	1.10	0	5	9	8	13	s.	Dr. A. F. Hendric
Patton (near)	Bollinger	500	1								2.50		1.00	0	4					George F. Ellis.
Poplar Bluff	Butler	339	12	45.6	-2.1	78	8†	14	24	51	2.56	-0.92	1.50	T.	4	16	3	11		Miss Belle Kinne.
Sikeston	Scott	328	15																	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	48.2	+1.3	74	7	23	24	31	2.91	-1.11	1.12	T.	6	11	9	10	n.	U. S. Weather Bu
Section means and extremes				48.0	0.0	78	4†	14	21	51	2.56	-0.95	2.00	T.	5	13	9	10	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	48.1[b]	+1.5	77	7	14	24	42	3.62	+0.81	1.42	0	3	13[b]	6[b]	9	s.	V. H. Kirkendall
Bolivar	Polk	1,071	28	45.0	-2.2	68	11†	13	24	39	0.95	-1.61	0.31	0	6	21	2	7	sw.	A. C. Fink.
Cassville	Barry	1,500	5																	William Talbert.
Crocker	Pulaski	1,126	5	53.7[f]	+6.9	71	8	27	17	37	0.97	-0.99	0.97	0	1					Roy W. Reed.
Dean	McDonald	1,000	17	47.2	-2.7	77	10	13	21	50	5.83	+3.00	3.26	0	5	21	2	7		H. E. Dean.
Eldon	Miller	934	15	45.4	-0.2	79	5	11	24	42	0.40	-1.95	0.20	T.	2	4	9	12	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	3	49.0		76	7†	17	21	42	3.22	-0.88	1.20	0	5	16	8	6	ne.	R. C. Walton.
Gano	Dent	1,250	12	45.6	2.0	76	7	15	24	37	1.44	-0.52	1.07	0	4	12	9	9	nw.	A. C. Leach.
Goodland	Iron	1,000	11	45.0	+0.3	77	7	10	24	50	2.62	-0.20	1.48	0	3	18	5	7	n.	F. M. Adams.
Hollister	Taney	735	7	51.2	+3.1	78	6†	18	24	46	7.75	+4.73	3.10	0	5	20	0	10	sw.	W. P. Chapmann.
Houston	Texas	1,280	23	48.0	+1.6	74	6†	12	24	40	2.55	+0.01	1.20	0.5	4	18	4	8	nw.	R. F. Harmon.
Ironton	Iron	925	38	44.5	+0.5	76	7	10	21	48	2.70	-1.01	1.25	T.	4	11	12	7	ne.	W. H. Delano.
Koshkonong	Oregon	958	15	49.7	-0.1	77	16	19	21	37	1.63	-1.36	1.08	T	5	13	5	12	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	27	45.6	-0.7	75	7†	11	24	55	1.36	-1.20	0.62	T.	8	19	8	3	s.	Leonard E. Dicker
Lockwood	Dade	1,078	21	47.9	--0.7	75	10	20	24	34	2.02	-0.05	0.61	0	4	16	3	11	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	46.6	-0.7	76	6†	14	24	50	3.74	+1.60	1.85	T	5	15	8	7	nw.	Mo. Fruit Exp. St
Mount Vernon	Lawrence	1,486	37																	C. L. White.
Neosho	Newton	1,011	33	47.2	-0.2	76	10	15	24	46	4.24	+1.36	2.04	0	7	20	1	9	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	46.2	+1.7	76	5†	13	24	51	1.22	-1.32	0.91	T.	3	14	9	7	s.	Prof. Elmo G. Har
Springfield	Greene	1,350	28	47.4	-3.0	73	10	20	21	32	2.61	-0.03	1.51	T.	6	15	6	9	s.	U. S. Weather Bur
Section means and extremes				47.4	+0.2	79	5	10	21	55	2.72	-0.06	3.26	T.	4	16	6	8	s.	
Southwest Plain.																				
Amoret	Bates	831	7	46.2	-0.1	74	4†	14	24	43	T.	-1.59	T.	T.	0	13	8	9	sw.	Darby Fruit Farm
Appleton City	St. Clair	853	25	47.4	+1.3	75	4	17	24	35	0.27	-1.91	0.12	T.	3	14	8	8	sw.	W. G. Bigelow.
Clinton	Henry	765	29	47.0	-0.6	76	4	15	24	41	0.15	-1.78	0.15	T.	1	13	4	13	sw.	A. E. Derwent, M.
Harrisonville	Cass	912	43	44.4	+2.0	75	8	14	24	44	0.16	-1.81	0.05	T.	4	9	1	20	sw.	A. J. Sharp.
Lamar	Barton	980	35	47.5	+0.8	77	4†	16	24	43	1.23	-0.95	0.71	0	4	16	4	10	s.	Joe W. Springer.
Lamonte	Pettis	863	27	45.4	+0.8	76	4	10	24	42	T.	-1.93	T.	T.	0	12	6	12	s.	J. Ed. Hall.
Marshall	Saline	779	25	45.2[a]	0.8	73	4†	14	24	35	0.08	-2.06	0.05	T.	2	11	6	13	sw.	Dr. W. H. Black.
Nevada	Vernon	860	22	47.5	+3.4	76	9	16	24	35	0.46	-1.43	0.27	0	4	20	1	19	sw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	47.7	+2.7	76	4	19	24	31	0.07	-1.70	0.07	0.5	1	14	6	10	sw.	Geo. H. Collins.
Warsaw	Benton	715	11	45.2	-3.1	80	4	8	24	54	0.39	-1.95	0.28	T.	3	15	5	10	sw.	J. R. Smith, M. D.
Section means and extremes				46.4	+0.6	80	4	8	24	51	0.28	-1.71	0.71	T.	2	14	5.	11	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	47.5	+3.7	76	7	24	19	42	0.05	-1.88	0.05	0	1	20	4	6.	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	42.0	-1.4	72	8	9	24	38	T.	-1.55	T.	T.	0	13	6	11	nw.	M. H. Moulton.
Chillicothe	Livingston	768		43.0	+0.6	76	8	20	29	47	0		0	0	0	22	0	8	sw.	Dr. J. R. Campbell
Conception	Nodaway	982	31	45.9	+4.5	75	7†	19	29	33	0.03	-1.21	0.03	T.	1	13	10	7	sw.	Fr. Adelhelm Hess
Gallatin	Daviess	803	16								0.05	-1.74	0.02	T.	3	16	5	9	n.	Robert R. Wynne.
Grant City	Worth	1,131	23	44.8	+2.0	75	7	16	24†	39	0.20	-1.22	0.20	T.	1	18	2	10	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	47.7	+6.2	71	4	25	21	32	0.06	-1.79	0.03	0.1	4	15	7	8	s.	U. S. Weather Bure
Kidder	Caldwell	1,020	25	46.9	+4.6	71	7†	20	29	32	0.02	-1.67	0.02	1.0	1	19	1	10	sw.	J. F. Sharp.
Lexington	Lafayette	688	34	47.2	+3.2	75	6†	25	24	33	0.08	-1.79	0.08	0.5	1	16	0	14	n.	J. W. Keithley.
Liberty	Clay	864	27	46.1[b]	+2.7	76	4†	18	21	37	0.02	-1.61	0.02	0.2	1	12[b]	4[b]	6[b]	nw.	W. C. Wilmott.
Maryville	Nodaway	1,036	25	42.8	+3.8	77	7	15	24	46	0.17	-1.26	0.15	T.	2	18	4	8	s.	J. R. Brink.
Oregon	Holt	1,048	60	45.0	+4.8	73	8	17	24	32	T.	-1.63	T.	T.	0	15	9	6	s.	Tom Curry.
St. Joseph	Buchanan	967	44	46.1		75	8	17	24	31	0.04	-1.67	0.02	0.1	3	12	9	9	s.	U. S. Weather Bure
Tarkio	Atchison	976	4	44.8	+4.7	75	7	14	24	38	0.18	-1.06	0.12	0	3	22	2	6	sw.	John F. Frazier.
Trenton	Grundy	822	21	44.4	+1.8	70	7	17	24	29	T.	-1.65	T.	T.	0	18	9	8	s.	W. H. Estes.
Section means and extremes				45.3	+3.2	77	7	9	24	47	0.06	-1.55	0.20	0.1	1	16	5	9	s.	
State means and extremes				46.1	+1.5	80	4	8	24	55	1.05	-1.16	3.26	T.	3	11	5	11	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete rep used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post office addresses of these stations are as follows: of Oakfield, Pacific. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for October, 1917.

Stations.	Watersheds.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ast Plain.																																	
	Missouri											T.	T.	T.	.02								T.					.08	T.				0.10
	Grand									T																							T.
	Chariton										.13	.01															T.						0.14
	Missouri	T.									.02	T.	T.	.01								.01					.06				T.		0.10
	do										.01	.04										T.											0.05
	do										.03	.01	T.	T.									T.				13	.02	T.				0.19
	Meramec											T.																.46		.28			0.74
	Mississippi											.21																					0.21
	do	T.									.06	T.	T.	T.									T.				01	.01					0.08
	Missouri										.01			T.	T.									.01				.35	T.	.01			0.38
	do																											.30	.01				0.31
	Chariton											.01	T.	T.																			0.01
	Mississippi											.02	T.															T.					0.02
	do	T.									.02	.19	T.											T.			02						0.23
	Chariton																																
	Mississippi																						T.										T.
	Meramec	T.																						T.			.30	.31	.17	.13			0.91
	do										T.	T.											T.					.85	T.	.30	T.		1.15
	Mississippi										.01	03		.02														.02					0.08
	Grand										.05	T.															T.	T.					0.05
	Missouri										T												T.					.15	.05	.30			0.50
	Mississippi	T.									T.	.01	T.										T.				.21	.21	.30	.05	T.		0.78
	do	T.									.02	.01											.01				.22	.23	.32	.08			0.89
	do																																0.00
	do	T.								T.		.05	T.	T.													T.						0.05
	Meramec										.04																	.76		.26			1.06
	Grand									T.		.02	T	T.	T.													06			T.		0.08
	Meramec										T.	.02												T.				.54	T.	.43	T.		0.99
	Mississippi										T.																T.	.25	T	.02	T.		0.27
	do	T.									.01	T.	T.														T.						0.01
Lowlands.																																	
	Mississippi	T.										.43	.40										T.	T.			T.	.05	.40	.20	T.		1.48
	Black										T.	T.								.03			.03	T.			.10	.28	2.00	.15			2.59
	Mississippi										.01		.08										.02				56	.60	.85	.70			2.81
	do										.03																.80	.50	1.10	.65			3.08
	do		T.									.01	.12											.01			.02	.04	.94	.85			1.99
	do																										.50	1.00	.80	.20			2.50
	Black											.10	T.							T.			T.	T.	T.	T.	T.	.11	1.50	.85			2.56
	Mississippi																																
	do										T.	1.12			T.				T.				.01	T.			.41	.68	68	.01			2.91
	Gasconade										T.			T.						T.							T.	.90		.35			1.25
	Black																										1.42	1.08	1.12				3.62
	Osage										.03								.10								.31	17	.16	.18			0.95
	White																																
	Gasconade																										.97		T.				0.97
	Neosho											T.						.07	1.08								.30	3.26	1.12		T.		5.83
	Osage																										20	.20					0.40
	Black											T.									.07						.65	1.20	1.05	.25			3.22
	Meramec										T.			T													.79	.28	.34	.03			1.44
	Black																										1.48	.85	.29				2.62
	White																		.15							.20	1.80	2.50	3.10				7.75
	Gasconade											T.							T.				T.		.15		.10	1.10	1.20				2.55
	Mississippi		T.									T.								.05				T.				1.25	.65	.75			2.70
	Black										T.									T.			T.		T.		.26	.22	1.08	.03	.04		1.63
	Osage	T	T.								.05	T.	.02	.01	T.										T.	.10	.30	.62	.03	.23			1.36
	do											T.							.61								.38	.48	.55				2.02
	White												T.							.11			T.		T.		.28	1.30	1.85	.20			3.74
	Neosho																																
	do											T.		T.				.03	.97	.03							.26	2.04	.87	T.	.04		4.24
	Meramec													T.						T.							T.	.91	.05	.26			1.22
	White											.03		T.				.01	.37				T.		T.		.41	1.49	.30		T.		2.61
	Meramec																						T				.03	.80	05	.30			1.18
	Osage										.02									.01							.10	.59		.03			0.75
Plain.																																	
	Osage													T.	T.			T.							T.								T.
	do	.07										T.		T.				T							T.		.12	.08					0.27
	do																										.15						0.15
	do											.05	.05						.03							T.		.03					0.16
	Neosho											T.						T.	T.	.71							T.	.32	.13	.07			1.23
	Missouri												T.	T.	T.								T.		T.	T.	T.						T.
	do											.03	T.										T.		T.		T.	.05	T				0.08
	Osage											.07							.05								.27		.07				0.46
	do																											.35					0.35
	Missouri											T.	T.	T.				T.					T.		.07	T.	T.						0.07
	Osage	T.									.01	T.	T.	T											T.		.28	.10					0.39
	Missouri													T.									T.			T.		T.					T.
Plateau.																																	
	Grand																								.05					T.			0.05
	do										T.			T.											T.								T.
	do																																0.00
	Missouri										.03														T.								0.03
	Grand										T.	.01	T.	.02				T.					.02		T.								0.05
	do										T.	.20		T.	T.								T.		T.						T.		0.20
	Missouri											.03	T.	.01				.01							.01		T.				T.		0.06
	Grand																								.02								0.02
	Missouri																									.08							0.08
	do																								.02								0.02
	do											.15	T.	.02											T.								0.17
	do										T.							T.					T.		T.								T.
	do										.01	T.	T.	.02			T.	T.				T.			.01								0.04
	do									T.	.12	.01													.05								0.18
	Grand									T.	T.		T.									T.			T.		T.						T.

ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the servation.

† Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.

r Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate all not recorded.

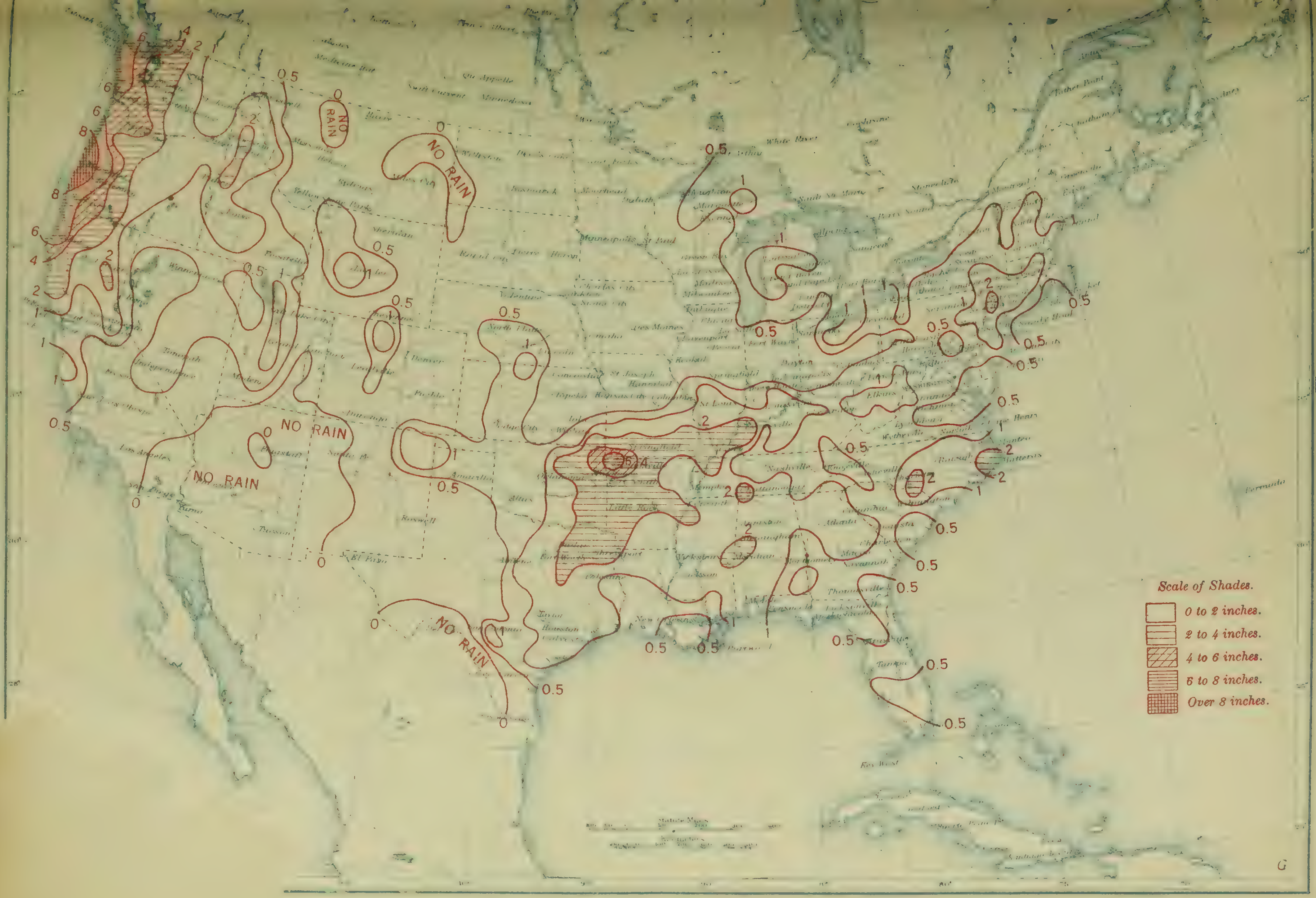
Daily temperatures for November, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	49	53	69	75	75	79	77	76	73	73	63	47	43	41	57	73	64	54	55	71	71	44	43	39	48	39	41	46	41	51
	Minimum	24	22	28	45	43	39	40	39	38	41	48	38	40	38	35	41	32	43	25	39	39	41	31	15	11	34	[illegible]	25	[illegible]	[illegible]
Columbia	Maximum	43	50	71	75	75	74	72	72	72	73	58	45	42	41	52	68	64	55	50	68	68	51	[illegible]	[illegible]	44	[illegible]	47	[illegible]	44	[illegible]
	Minimum	24	20	36	44	47	46	41	40	35	49	45	49	39	37	34	38	39	37	29	32	41	32	29	13	28	34	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	43	48	68	75	74	73	71	72	73	72	57	45	40	39	52	69	65	51	49	68	69	43	37	[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	34
	Minimum	25	20	32	44	41	38	39	39	39	45	45	39	38	35	33	38	36	38	26	36	40	31	22	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	39	48	68	73	72	74	75	65	66	71	59	47	43	40	51	70	69	51	48	67	66	52	[illegible]	[illegible]	42	35	[illegible]	[illegible]	39	42
	Minimum	33	23	36	41	49	45	41	41	34	46	42	39	40	37	35	38	35	36	30	37	30	35	19	15	19	23	32	32	35	[illegible]
Jefferson City §§	Maximum	48	48	70	73	72	72	74	72	72	74	60	45	43	43	52	67	67	59	47	68	67	46	47	40	43	[illegible]	42	[illegible]	42	[illegible]
	Minimum	24	20	25	36	40	41	40	40	39	39	45	40	40	38	35	35	38	37	50	29	40	44	30	14	16	[illegible]	31	31	34	[illegible]
Kirksville	Maximum	40	49	66	72	71	71	75	65	70	70	62	51	40	38	57	72	63	62	51	68	68	64	57	[illegible]	[illegible]	[illegible]	41	[illegible]	42	[illegible]
	Minimum	23	22	36	42	40	44	47	40	33	46	41	38	37	33	32	36	38	33	23	37	38	32	24	12	25	29	31	21	28	[illegible]
Louisiana	Maximum	41	37	60	73	73	65	65	60	55	60	60	53	44	43	48	65	57	58	52	60	64	60	39	34	15	42	41	..	42	[illegible]
	Minimum	25	18	28	29	35	33	35	32	32	35	44	34	40	38	35	36	30	33	30	40	38	38	30	9	23	[illegible]	[illegible]	..	36	[illegible]
Macon §§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mexico §§	Maximum	40	69	73	70	73	73	71	75	73	73	60	42	42	41	55	70	66	55	50	68	68	43	38	39	45	38	41	41	45	46
	Minimum	26	20'	22	43	42	44	38	38	32	34	41	40	39	37	31	34	34	36	25	33	39	40	28	11	12	27	33	33	33	[illegible]
Oakfield	Maximum	49	51	71	73	74	75	76	75	72	74	61	50	42	43	53	72	74	62	50	69	70	60	40	57	48	57	33	40	39	47
	Minimum	26	25	34	41	44	46	43	45	46	49	45	39	39	38	33	42	46	46	32	29	42	37	27	16	23	32	32	34	34	37
St. Catharine	Maximum	42	48	64	70	70	72	74	72	70	67	61	55	42	41	56	67	62	57	50	67	68	64	38	36	46	45	43	41	40	45
	Minimum	23	20	30	42	42	38	41	44	35	45	44	40	37	35	31	36	35	40	23	35	38	31	27	12	27	33	33	24	27	39
St. Louis (1)	Maximum	41	45	67	70	71	72	74	72	68	68	55	49	46	44	54	70	70	62	49	66	67	56	37	37	42	38	42	39	41	[illegible]
	Minimum	34	32	35	41	48	52	53	53	50	52	47	40	41	39	36	46	53	41	33	36	46	33	25	24	29	33	34	36	36	[illegible]
Unionville §§	Maximum	40'	50	60	68	70	74	73	66	70	68	66	48	45	58	60	70	66	46	50	60	68	46	31	42	43	40	44	42	43	51
	Minimum	20	22	22	34	42	40	42	37	34	35	40	40	34	33	34	42	41	40	22	22	31	38	26	12	14	25	30	25	26	26
Warrenton §§	Maximum	42'	48	70	73	72	73	74	73	72	73	58	43	42	41	53	69	70	54	49	67	66	44	34	36	45	38	41	38	39	46
	Minimum	27	24	33	41	44	42	46	49	44	46	44	34	39	37	33	35	42	44	27	30	39	42	28	14	20	30	31	31	34	34
Southeast Lowlands.																															
Caruthersville	Maximum	59	54	67	78	78	78	78	76	75	73	62	62	55	47	62	72	78	68	63	61	72	62	44	46	50	48	57	62	52	60
	Minimum	35	32	27	33	37	37	37	37	37	38	42	51	42	39	32	36	40	42	42	30	36	44	35	25	35	38	46	50	40	40
Doniphan	Maximum	52	48	61	69	70	72	73	73	71	67	64	64	57	51	62	73	71	64	61	64	73	66	41	42	47	42	49	51	51	57
	Minimum	31	26	23	29	30	31	31	31	31	33	42	46	41	40	23	33	35	42	39	25	32	40	25	14	33	36	37	39	38	39
Jackson	Maximum	50	48	65	78	75	75	77	77	75	67	69	54	47	45	54	68	70	65	56	61	70	62	40	38	49	40	50	50	41	50
	Minimum	25	26	22	28	28	31	30	30	32	31	44	34	32	42	36	31	34	38	35	22	29	40	32	15	17	24	33	33	38	41
Marble Hill	Maximum	52	50	65	73	73	74	78	75	75	69	64	59	48	58	60	74	75	66	49	66	75	66	52	55	48	41	48	49	43	57
	Minimum	37	31	25	29	33	30	33	35	34	33	41	44	41	30	27	36	35	40	36	24	35	40	22	16	23	30	33	37	37	40
Poplar Bluff §§	Maximum	55	52	66	74'	75	75	74	78	78	69	68	64	62	58	58	71	79	64	54	65	70	59	42	41	41	17	[illegible]	44	48	59
	Minimum	27	24	22	23	29	30	30	31	31	32	33	42	40	40	24	26	32	36	38	24	25	31	33	14	15	32	34	38	37	35
Ozark Plateau.																															
Birchtree	Maximum	51	60	70	73	75	....	77	75	75	73	65	62	52	53	66	75	73	65	55	72	....	54	41	44	46	38	49	49	52	56
	Minimum	27	21	37	40	40	....	40	39	38	44	42	42	38	39	24	42	43	42	35	37	....	47	31	14	29	32	32	35	35	38
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	49	52	72	75	79	75	75	75	74	75	60	51	43	43	57	72	69	56	51	70	69	61	39	40	29	40	41	40	41	50
	Minimum	22	18	30	36	38	39	43	40	36	46	41	38	36	36	32	40	40	40	26	30	29	33	24	11	28	31	35	32	[illegible]	29
Fruit City	Maximum	49	50	74	70'	74	74	76	76	74	72	63	61	48	51	54	60	70	76	68	69	71	69	67	45	43	40	50	49	44	54
	Minimum	30	25	40	39	40	46	46	46	46	45	50	44	38	37	35	38	41	50	33	27	38	28	26	17	[illegible]	31	31	34	31	37
Gano	Maximum	42	48	68	70	70	72	76	65	73	70	62	55	43	41	53	68	68	61	51	64	64	62	37	40	41	38	51	42	41	51
	Minimum	26	20	31	40'	43	45	46	40	42	38	42	46	37	36	25	41	43	47	29	28	42	35	28	15	28	32	32	33	32	32
Hollister	Maximum	54	56	64	72	76	78	76	78	74	76	78	76	72	68	60	64	62	58	62	78	76	78	66	58	56	54	62	60	68	66
	Minimum	32	20'	24	28	32	32	34	36	38	40	38	36	34	32	26	34	42'	44	42	32	34	36	34	18	36	38	44	42	44	46
Ironton §§	Maximum	51	48	67	71	73	74	76'	75	74	69	65	58	49	48	58	71	73	59	51	67	71	46	28	42	45	41	49	44	45	55
	Minimum	21	21	22	35	32	29	28	29	29	30	36	44	40	39	20	34	31	43	32	22	34	43	30	10	20	27	32	36	35	37
Koshkonong	Maximum	53.	50	67	71	74	75	75	75	75	73	62	63'	55	55	67	77	74	64	54	66	74	64	40	45	51	44	51	51	56	56
	Minimum	33	24	31	36	41	43	41	45	42	47	43	43	35	39	30	45	47	51	39	30	43	39	30	19	31	33	36	37	35	31
Lebanon §§	Maximum	49	51	70	72	72	74	75	72	75	75	45	61	42	48	55	72	68	55	52	70	68	67	69	48	45	48	49	40	48	54
	Minimum	25	16	15	31	41	41	43	39	38	39	39	37	47	36	21	26	37	38	34	26	35	34	33	11	20	10	34	37	30	30
Mountain Grove §§	Maximum	48	55	60	65	71	76	73	73	76	73	55	65	48	52	65	73	65	56	52	63	54	46	49	42	47	46	52	56	51	56
	Minimum	26	19'	20	30	39	37	47	41	44	47	39	39	36	36	22	23	47	43	36	28	37	41	29	14	17	31	31	39	32	31
Neosho	Maximum	53	57	70	73	73	75	73	75	75	76	68	66	57	51	66	71	66	60	50	64	70	66	41	47	47	54	55	48	50	56
	Minimum	19	16	28	40	39	33	32'	32	34	45	34	31	39	38	20	25	32'	39	39	25	32	40	25	15	28	36	43	39	37	40
Rolla §§	Maximum	48	51	72	73	76	76	76	75	76	75	57	53	43	46	55	72	65	58	54	67	74	46'	40	40	44	43	44	37	41	51
	Minimum	29'	20'	21	35	44	45	45	45	41	45	45'	40	38	38	32	32	40	43	31	29	33	41	29	13	13	32	32	37	34	34
Springfield	Maximum	48	50	67	69	70'	70	70	70	70	73	52	62	41	46	57	69	62	53	50	62	66	57	36	39	47	44	51	42	50	52
	Minimum	29	28	35	42'	47	49	48	49	51	50	42	40	37	35	27	44	48	44	36	33	43	34	27	20	31	33	41	34	31	42
Southwest Plain.																															
Amoret	Maximum	50	56	65	74	71	74	74	74	74	72	65	55	43	45	60	69	63	55	50	73	70	62	39	41	46	44	47	43	39	54
	Minimum	25	23	34	43	42	36	42	36	42	45	43'	37	37	35	22	35	43	33	28	30	38	36	26	14	30	36	36	32	30	34
Appleton City	Maximum	51	54	70	75	73	74	71	73	74	74	64	56	44	44	51	70	65	59	50	72	70	62	41	39	44	44	41	40	45	55
	Minimum	27	25	35	42	40	43	45	42	42	48	44	41	39	39	24	36	43	42	30	32	37	40	29	17	32	37	38	31	31	37
Clinton	Maximum	51	53	71	76	75	75	75	73	75	65	60	69	60	47	54	71	66	59	52	72	70	63	41	39	40	43	42	40	41	53
	Minimum	24	21	31	41	39	40	38	32	37	40	45	49	38	39	39	34	38	40	29	34	37	39	30	15	30	31	38	33	29	36
Harrisonville §§	Maximum	48	54	67	73	71	73	73	75	71	70	60	40	40	40	56	67	63	60	48	55	75	50	39	36	45	41	45	46	48	53
	Minimum	23	22	23	35	40	40	42	38	29	41	45	38	37	36	28	28	37	39	28	27	37	37	27	14	15	32	36	32	30	20
Lamar §§	Maximum	55	59	72	77	76	77	76	77	77	77	67	42	44	44	64	72	67	47	55	70	72	50	41	45	55	48	42	41	51	55
	Minimum	24	21	32	40	40	40	39	38	41	49	41	39	38	37	21	31	39'	42	37	30	38	44	27	16	30	37	32	40	31	38
Lamonte	Maximum	47	51	70	76	75	73	71	74	75	72	71	61	52	46	41	57	65	55	50	70	70	61	44	38	41	41	41	39	40	52
	Minimum	21	21	36	34	34	42	45	39	39	38	49	45	32	38	39	35	34	34	25	30	39	35	28	10	26	35	31	31	22	32
Marshall	Maximum	46	47	68	73	73	73	73	72	72	71	63	57	43	42	54	67	....	54	49	64	68	63	39	37	45	40	41	39	40	49
	Minimum	21	24	33	45	41	41	42	38	38	45	45	39	38	37	34	35	34	37	26	34	36	36	28	14	30	34	34	29	27	33
Warrensburg	Maximum	45	55	71	76	75	75	75	75	74	72	60	53	45	41	57	71	66	57	50	71	70	63	39	39	40	41	43	39	40	53
	Minimum	28	24	37	47	45	47	49	49	48	50	47	39	38	38	34	41	41	40	26	37	41	36	28	19	29	36	36	35	31	33
Warsaw	Maximum	52	66	78	80	76	78	76	70	72	74	65	53	45	42	60	68	72	60	54	76	73	65	50	40	56	45	42	40	52	60
	Minimum	18	14	24	32	28	28	29	28	29	38	39	32	39	39	25	27	28	36	28	25	30	30	26	8	30	34	36	31	25	36
Northwest Plateau.																															
Chillicothe §§	Maximum	30	30	69	69	69	65	74	76	73	70	60	62	45	40	51	45	64	51	53	49	70	40	41	30	46	39	48	41	39	50
	Minimum	26	19'	22	25	44	50	40	39	40	38	39	38	39	37	34	31	39	40	21	25	35	38	28	26	25	28	29	24	20	28
Grant City	Maximum	45	40	68	68	72	68'	75	71	70	63'	51	53	50	41	64	70	59	52	55	66	69	64	55	36	28	40	48	47	40	48
	Minimum	22	28	36	40	42	41	42	42	36	40	45	46	36	36	25	39	45	37	35	35	42	31	24	16	16	33	34	20	23	19
Kansas City	Maximum	47	55	68	71	73	73	73	71	73	66	60	50	42	42	62	68	61	50	49	70	70	52	39	37	39	41	46	42	40	53
	Minimum	32	32	42	46	52	49	53	51	53	50	46	39	37	36	30	18	46	33	29	38	41	31	29	24	30	37	34	30	27	40
Kidder §§	Maximum	46	52	67	69	72	72	71	74	71	67	63	42	40	38	62	70	72	70	51	67	72	42	38	35	42	39	47	45	47	52
	Minimum	30	26	37	44	46	43	46	50	43	47	48	39	38	36	30	45	48	40	26	38	42	40	28	22	28	38	34	26	20	38
Lexington §§	Maximum	50	54	68	71	74	75	75	71	73	69	60	44	42	40	60	70	62	53	62	70	70	49	40	37	40	40	45	37	40	52
	Minimum	29	25	38	47	42	45	45	48	40	50	48	39	38	38	35	42	42	38	28	39	44	46	29	25	29	36	36	30	26	34
Maryville §§	Maximum	46	58	70	68	73	75	77	76	73	55	62	41	40	43	67	70	63	47	54	67	69	36	38	34	45	38	47	47	37	47
	Minimum	20	24	24	37	40	42	41	42	40	39	40	36	35	32	26	30	37	38	23	21	32	34	26	15	16	20	29	21	21	21
Oregon	Maximum	45	55	66	67	70	72	72	73	70	65	62	53	42	42	63	67	60	49	48	65	69	60	37	35	41	40	47	44	48	50
	Minimum	25	26	39	42	46	47	46	46	51	40	42	37	37	32	28	40	41	31	20	33	41	28	27	17	27	23	30	21	25	29
St Joseph	Maximum	46	46	68	71	74	74	74	75	73	60	63	48	41	40	62	70	61	49	50	67	70	51	40	34	41	40	47	48	39	50
	Minimum	28	30	42	46	49	50	50	48	49	46	44	38	36	31	28	41'	44	33	25	37'	44	32	21	17	30	37	33	26	24	35
Trenton	Maximum	45	45	63	64	68	69	70	66	62	60	62	52	46	42	58	63	60	54	48	63	67	60	43	36	41	28	43	41	37	48
	Minimum	28	27	36	40	44	47	46	40	50	38	44	39	38	37	33	38	44	35	25	38	42	34	27	16	28	34	35	26	22	32

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning: the maximum temperature then read is cha

the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
Minneapolis
St Paul
Duluth
Denver
Little Rock
Nashville
Atlanta
Los Angeles
El Paso
Key West
Bermuda
G

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR NOVEMBER, 1917, AT THE UNIVERSITY O SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 85 and 86.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standa described in Circular L. Horizontal distance of the anemometer pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan: of thermometers above ground, 11 feet. Distance of rain gage fro 2.6 feet. The ground in the immediate vicinity of the pan slopes north, average 5 per cent grade. The soil is covered by blue gra being part of the University campus. There are no bodies of wate nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The o tions in the table herewith, were taken by Philip G. McGinnis, as observer, Weather Bureau. This is one of the "Class A" statio signed to furnish practical information relative to evaporation. F complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for November, 1917, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	*	*	.086	.092	.134	.101	.082	.064	.058	.083	.085	.020	.003	.017	.021	.034	.054	.052	.067	.033	.080	.131	.072	*	*	.104	001	.002	.007	018
Daily wind movement	35	37	30	38	49	25	23	17	15	22	38	31	48	38	35	26	23	22	67	31	41	104	102	41	19	45	47	33	47	22

*Total in next following measurement. † Indicates minus (−) Observations taken at 6:

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	14	1.25	−1.48	0.90	0	2	16	3	11	.....	Wm. R. Bennett.
Boonville	40	0.10	−2.23	0.08	0	2	18	1	11	se.	C. Randecker.
Cape Girardeau	10	....	....	....	0	..	..	.	..	......	D. L. Albert.
Glencoe	0	0.74	....	0.46	0	2	16	2	12	n.	Vint R. Neel.
Hermann	43	0.38	−2.44	0.35	0	4	11	8	11	w.	C. T. Maushund.
New Madrid	23	1.99	−2.20	0.94	0	7	13	4	13	ne.	Miss Josie Smith.
Osceola	17	0.35	−2.69	0.35	0	1	15	2	13	......	Wm. E. Mathews
Pacific	0	1.15	....	0.85	0	2	10	4	16	......	R. C. Dougherty'
Steelville	15	1.18	−1.56	0.80	0	4	13	0	17	s.	Wm. J. Drennen.
Tuscumbia	0	0.75	....	0.59	0	5	14	1	15	s.	C. B. Wright.
Union	0	1.06	....	0.76	0	3	12	5	13	nw.	J. Wm. Keller.
Valley Park	0	0.99	....	0.54	T.	3	13	0	17	w.	H. J. Lucksinger.
Waverly	2	T.	....	T.	T.	0	16	3	11	sw.	J. W. Cauthorn.

Grant Cit
Kansas City .
Kidder §§ .....
Lexington §§ ..
Maryville §§
Oregon.....
St. Joseph ....
Trenton ....

[illegible]
the preceding day, on [illegible]

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

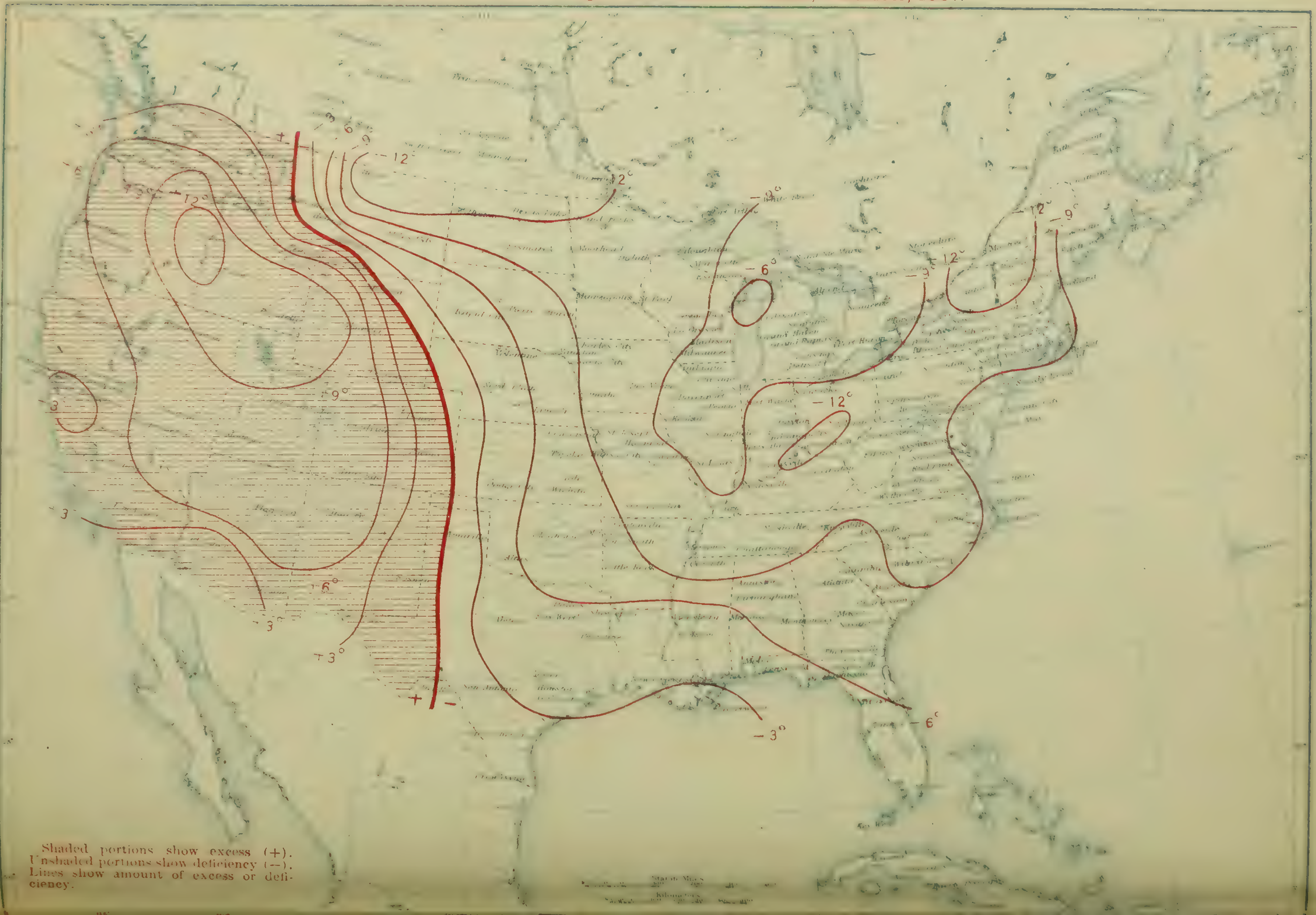
DECEMBER, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JANUARY 22, 1918.

Departure of the Mean Temperature from the Normal, December, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

ARTMENT OF AGRICULTURE. WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

COLUMBIA, MO., DECEMBER, 1917. No. 12.

GENERAL SUMMARY.

1917, was abnormally cold and dry, and gener- ble for outdoor occupations.

ratively mild weather that prevailed at the close continued during the opening days of December, coming of the 4th and 5th a cold wave spread over by the 8th zero conditions obtained generally, date to the 16th temperatures were constantly zing point, save for a few hours on the 12th at a ong the southern border. The following 10 or 11 paratively mild. The four concluding days of wever, were again abnormally cold, although not previous period.

tation was markedly deficient in all sections, in other Decembers since 1867 have been drier than onth. The precipitation was mostly in the form n storm prevailing on the 7th, 8th, and 9th. s very fine and dry, and, under a strong wind iderable depths and seriously, for the time being, ilroad and other traffic, especially in the central portions of the State.

condition of wheat at the close of the month was rthwestern section but fair in all other sections. severe cold and generally poor condition of late he snow was timely. Fortunately there was little continued in good condition; but water was get- some localities. About 70 per cent of the corn gathered.

TEMPERATURE.

ly mean temperature for the State as a whole, as records of 62 stations, was 25.5°. The mean de- the normal for 60 stations having 10 or more was minus 8.7°. During the past 29 years only (1909) was colder than the present month. The mild, but a cold wave spread over the State on ontinued until the 17th; from about the 8th to the , the cold was severe, temperatures being as low, instances lower, than ever before recorded so early Quite a mild period prevailed from about the 4th, but from the 25th to the close the tempera- normal, the departures on the 29th and 30th . The cold was very uniform, spreading over the Minimum temperatures were 32° or lower on an days; and zero or lower on 8 days, −23°, at two e 9th, being the lowest.

PRECIPITATION.

e precipitation for the State, 82 stations reporting, . The departure from the normal for 70 stations more years' record was minus 1.40 inches. The s marked as well as uniform in all divisions. The month in the northwestern plateau and northeast- re only 22 per cent and 27 per cent, respectively, amounts, while in the southwestern plain, Ozark southeastern lowlands, the monthly totals were ut, 47 per cent, and 37 per cent, respectively, of mounts. Only three other Decembers extending were drier, namely, in 1912, 1900, and 1876. The monthly precipitation was 2.84 inches at Mt. Ver- least was 0.10 inch, at Bethany. The precipitation was mostly snow.

The average snowfall for the State as a whole was 7.3 inches, or about 3 inches greater than normal. In the Ozark Plateau and southeastern lowlands the fall was 10.7 and 14.9 inches, respectively, being unusually deep for December, especially for the latter section. The heaviest monthly totals reported were 20 inches in Lawrence County, Ozark Plateau, and something over 20 inches in Mississippi County, Southeast Lowlands.

The number of days with 0.01 inch or more precipitation was 6.

WIND.

The prevailing winds were from the northwest. The average hourly velocity, 8 stations equipped with anemometers reporting, was 10.1 miles, or about normal. Brisk to strong winds prevailed on the 9th, and over the northeastern section on the 20th, and 28th.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 136. This is about 46 per cent of the possible, and about 2 per cent below normal.

MISCELLANEOUS PHENOMENA.

Fog, dense---1st, 18th, 19th, and 24th. Halos, solar---2d, 3d, 5th, 6th, 9th, 10th, 11th, 21st, 24, and 25th. Lunar---2d, 19th, 22d, 24th, 25th, and 26th. Sleet---24th, 25th, and 30th.

ERRATA FOR NOVEMBER, 1917.

Chillicothe, lowest temperature 19° on the 2d. Lebanon, mean maximum temperature, 49.6°. Mexico, date of the highest temperature, 8th. Mt. Grove, monthly mean temperature, 46.1°.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity. Miles per hour.	Direction.	Date.
Columbia	30.27	77	.....	150	51	6,742	9.1	30	nw.	9
Hannibal	30.29	81	.....	.....	.....	7,001	9.4	31	sw.	20
Kansas City	30.26	76	69	144	49	[illegible]	12.8	49	nw.	9
St. Joseph	30.28	84	73	108	37	6,847	9.2	42	nw.	9
St. Louis	30.28	85	74	123	41	9,494	12.8	38	sw.	20
Springfield	30.26	84	74	150	50	[illegible]	11.4	48	n.	9
Cairo, Ill	30.27	80	74	.....	.....	[illegible]	10.2	39	sw.	9
Keokuk, Iowa	30.28	82	71	129	44	[illegible]	8.4	28	nw.	9

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	35.9	+1.7	70	0	2.29	−0.24	....	....	6	....	....	....
1889	46.8	+12.6	78	2	0.96	−1.09	....	....	5	....	....	....
1890	36.0	+1.8	76	3	1.03	−1.02	....	....	3	....	....	....
1891	39.8	+5.6	72	−1	1.90	−0.15	....	....	6	....	....	....
1892	29.1	−1.8	75	−22	2.58	+0.33	3.08	1.8	6	8	7	16
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+2.5	75	−7	2.13	+0.18	3.01	1.3	5	14	8	9
1895	34.3	0.1	69	−8	6.13	1.08	6.95	3.1	8	9	8	14
1896	38.6	4.4	79	5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	−4.9	71	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	5.5	74	−20	1.69	0.56	2.30	3.1	5	17	6	8
1899	30.4	−3.8	72	−13	2.11	0.16	1.70	6.6	9	12	9	10
1900	35.6	+1.4	68	−3	0.69	−1.36	1.18	0.6	4	14	8	9
1901	28.5	5.7	71	−29	2.93	+0.88	4.13	6.9	8	11	7	13
1902	30.7	−3.5	68	−7	2.91	0.06	2.30	3.1	8	10	4	7
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	0.9	66	−2	1.15	0.60	2.24	1.7	4	18	6	7
1906	36.3	+1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	[illegible]	+3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.1	+4.2	80	−4	0.85	−1.20	1.35	T	3	16	7	8
1909	24.9	−9.3	76	−17	2.86	+0.81	2.70	7.7	8	12	6	13
1910	31.2	3.0	67	−5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+2.5	74	−11	2.80	+0.75	2.00	5.1	7	13	6	11
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+4.5	71	−3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	7.1	68	−18	2.48	0.31	2.30	6.6	9	7	5	19
1915	34.7	1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13
1916	31.3	2.3	82	29	1.85	−0.29	3.40	4.4	6	15	6	20
1917	25.5	−8.7	82	−23	0.74	−1.10	2.51	7.3	5	11	7	13

Climatological data for December, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip., .01 inch or more	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Obser
Northeast Plain.																				
Brunswick	Chariton	650	36	21.6	-9.0	69	2	-11	10†	38	0.50	-1.23	0.19	6.8	6	10	0	21	n.	Louis Benecke
Clifton Hill	Randolph	731	....	23.9	-6.8	68	2	-13	10	33	0.69	-0.90	0.20	7.0	6	4	17	10	..	L. S. Harlan.
Columbia	Boone	784	26	21.0	-8.9	72	2	-9	10	36	0.44	-1.57	0.28	4.5	4	5	9	17	se.	U. S. Weather
Fayette	Howard	725	31	21.1	-10.4	70	2	-13	10	36	0.54	-1.23	0.20	5.5	5	....	....	....	....	Prof. T. B. Sp
Fulton	Callaway	818	12	24.6	-9.1	75	2	-15	10	43	0.50	-1.68	0.20	5.0	8	22	2	7	ne.	Dr. O. M. W
Gorin	Scotland	760	27	......	......	....	....	....	....	....	0.25	-1.64	0.40	3.8	4	2	12	17	sw.	J. W. Pullian
Hannibal	Marion	531	23	22.3	-9.0	66	2	-11	29	30	0.55	-1.10	0.23	7.3	6	11	7	13	sw.	U. S. Weather
Jefferson City	Cole	557	30	21.9	-11.1	73	2	-10	10	31	0.58	-1.37	0.28	9.1	6	15	5	11	n.	Miss Emma S
Keytesville	Chariton	660	3	......	......	....	....	....	....	....	0.60	....	0.20	6.0	4	....	....	....	....	J. T. Dewey,
Kirksville	Adair	969	24	21.2	-8.2	61	2	-15	29	32	0.28	-1.44	0.12	2.6	4	9	15	7	n.	Prof. Mark B
Louisiana	Pike	469	38	23.1	-7.9	62	2†	-15	11†	38	0.66	-1.06	0.25	8.0	8	12	12	7	n.	J. T. Farrell.
Macon	Macon	875	18	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	......
Mexico	Audrain	797	38	22.0	-10.2	72	2	-12	30	35	0.58	-1.51	0.32	4.0	2	14	17	0	s.	R. M. Llewelly
Oakfield‡‡	Franklin	793	35	25.7	-9.0	72	2	-10	10	32	0.56	-1.46	0.24	6.8	6	7	12	12	s.	E. L. Stones
Palmyra	Marion	652	4	19.5	-10.7	66	2	-14	30	41	0.42	-1.56	0.15	4.0	4	14	2	15	nw.	W. B. Markell.
St. Catherine	Linn	850	3	22.2	......	65	2	-15	29	29	0.27	......	0.10	5.5	3	8	12	11	ne.	L. D. Baker.
St. Charles	St. Charles	456	38	25.1	-9.9	65	2	-10	7	41	0.44	-1.51	0.30	4.6	5	4	10	17	nw.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	45	26.8	-8.7	66	2	-4	10	25	0.78	-1.45	0.39	7.5	11	5	11	15	s.	U. S. Weather
St. Louis (2)	do	578	4	25.0	......	66	2	-5	10	24	1.10	......	0.28	10.5	12	6	5	20	se.	St. Louis Univ
Shelbina	Shelby	779	24	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	S. G. Parsons.
Steffenville	Lewis	650	23	22.4	-8.0	68	2	-17	29	37	0.39	-1.32	0.15	6.0	4	10	11	10	sw.	Frank Hall.
Unionville	Putnam	1,072	23	18.0	-9.4	60	2	-18	30	41	0.36	-1.35	0.15	3.0	4	20	7	4	n.	Geo. W. Davis.
Warrenton	Warren	865	25	22.2	-9.9	70	2	-10	10	36	0.86	-1.31	0.26	7.7	10	9	12	10	s.	Prof. J. H. Fri
Keokuk, Iowa	Lee, Ia.	574	45	20.9	-8.5	62	2	-14	29	29	0.36	-1.51	0.14	4.5	7	12	10	9	nw.	U. S. Weather
Section means and extremes				25.1	-9.7	75	2	-18	30	43	0.52	-1.38	0.32	5.9	6	10	9	12	n.	
Southeast Lowlands.																				
Cardwell	Dunklin	270	5	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	J. M. Seaborn.
Caruthersville	Pemiscott	220	25	32.9	-7.0	78	1	-9	9	46	1.60	-2.70	0.65	16.5	3	16	4	11	n.	H. L. Averill.
Doniphan	Ripley	344	11	29.4	-8.1	68	1	-16	9	38	1.87	-0.94	0.7	11.0	6	14	5	12	s.	W. W. Martin.
Jackson	Cape Girardeau	458	25	26.4	-10.4	69	2	-23	9	36	0.76	-2.72	0.27	15.5	6	4	10	17	n.	L. M. Bean.
Marble Hill	Bollinger	420	24	28.6	-7.3	72	2	-12	10	38	0.42	-2.71	0.17	13.0	6	10	8	13	n.	Dr. A. F. Hend
Patton (near)	Bollinger	500	1	......	......	....	....	....	....	....	0.70	....	0.50	.....	2	....	....	....	....	George F. Ellis
Poplar Bluff	Butler	339	12	27.6	-9.6	70	2	0	9	43	1.07	-2.65	0.40	10.7	6	13	7	11	.....	Miss Belle Kin
Sikeston	Scott	328	15	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	H. B. Derr.
Cairo, Ill.	Alexander, Ill	359	43	28.6	-9.9	69	2	-7	9	29	2.31	-1.02	1.65	22.7	9	9	11	11	n.	U. S. Weather B
Section means and extremes				28.9	-8.7	78	1	-23	9	46	1.25	-2.10	1.65	14.9	5	11	7	13	n.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	22	28.0	-7.8	70	2	-14	9	39	0.87	-1.73	0.40	9.0	3	16	5	10	s.	V. H. Kirkenda
Bolivar	Polk	1,071	28	25.8	-10.3	66	2	-12	10	36	1.36	-1.12	0.60	12.0	3	20	6	5	nw.	A. C. Fink.
Cassville	Barry	1,500	5	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	William Talbert
Crocker	Pulaski	1,126	5	......	......	....	....	....	....	....	......	....	....	....	....	....	....	....	....	Roy W. Reed.
Dean‡‡	McDonald	1,000	17	28.3^{c}	-9.6	73	2	-21	9	41	1.15	-0.98	0.60	6.0	5	18	4	9	e.	H. E. Dean.
Eldon	Miller	934	15	24.2	-10.7	74	3	-11	8†	42	0.79	-1.69	0.10	8.0	5	7	16	8	e.	E. H. Shepherd
Fruit City	Reynolds	1,150	3	27.9	......	71	2	-10	9	34	1.25	-1.71	0.55	12.5	3	9	20	2	n.	R. C. Walton.
Gano‡‡	Dent	1,250	12	25.2	-10.5	71	2	-11	10	33	1.28	-0.69	0.40	10.7	7	12	8	11	s.	A. C. Leach.
Goodland	Iron	1,000	11	25.9	-8.5	71	2	-22	9	39	0.92	-1.53	0.60	8.8	6	11	10	10	n.	F. M. Adams.
Hollister	Taney	735	7	32.3	-7.4	66	23	0	10	35	1.40	-1.41	1.10	14.0	1	16	0	15	nw.	W. P. Chapman
Houston	Texas	1,280	23	28.0	-8.0	72	2	-12	9	33	1.75	-0.57	0.60	11.0	8	8	10	13	se.	R. F. Harmon.
Ironton	Iron	925	38	25.2	-9.2	70	2	-13	9†	43	1.25	-1.73	0.55	9.0	6	3	15	13	sw.	W. H. Delano.
Koshkonong	Oregon	958	15	29.6	-7.9	71	2	-10	9	36	1.28	-1.78	0.60	10.0	7	8	5	18	ne.	R. M. Hitt.
Lebanon	Laclede	1,265	27	25.0	-10.4	78	1	-13	10	41	1.60	-1.33	0.60	8.5	3	25	2	4	s.	Leonard E. Dick
Lockwood	Dade	1,078	21	27.8	-8.1	72	2	-12	9	31	0.44	-1.59	0.30	8.5	3	16	3	12	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	17	24.8	-9.9	68	2	-12	9	30	0.83	-1.72	0.68	9.0	3	5	7	19	nw.	Mo. Fruit Exp. S
Mount Vernon‡‡	Lawrence	1,480	37	25.0	-10.5	70	23	-14	9	35	2.84	+0.20	2.51	20.0	4	15	6	10	se.	C. L. White.
Neosho	Newton	1,011	33	29.8	-6.9	73	2	-23	9	43	0.81	-1.87	0.65	......	3	21	1	9	nw.	W. O. Buck.
Rolla	Phelps	1,139	34	24.8	-8.7	72	2	-10	10	42	0.95	-1.44	0.40	9.5	5	4	21	6	n.	Prof. Elmo G. H
Springfield	Greene	1,350	28	26.5	-7.0	71	2	-9	8	29	1.18	-1.49	0.93	16.0	3	10	14	7	s.	U. S. Weather B
Section means and extremes				26.9	-8.9	78	1	-23	9	43	1.19	-1.31	2.51	10.7	4	12	9	10	s.	
Southwest Plain.																				
Amoret	Bates	831	7	25.8	-7.1	70	2	-9	8†	43	0.50	-1.24	0.30	5.0	3	8	7	16	nw.	Darby Fruit Far
Appleton City	St. Clair	853	25	32.8	-1.5	70	2	-8	8	40	0.22	-1.56	0.07	4.0	6	7^{c}	11^{c}	10	sw.	W. G. Bigelow.
Clinton	Henry	765	29	26.6	-8.0	72	2	-10	10	39	0.55	-1.30	0.20	5.5	3	8	11	12	nw.	A. E. Derwent, M
Harrisonville	Cass	912	43	22.8	-8.6	68	2	-12	10	40	0.30	-1.56	0.18	3.2	3	8	3	20	nw.	A. J. Sharp.
Lamar	Barton	980	35	27.8	-7.7	72	1†	-12	9	36	1.30	-0.67	1.00	7.0	3	12	1	18	s.	Joe W. Springer
Lamonte	Pettis	863	27	23.8	-11.3	71	2	-17	10	39	0.50	-1.30	0.30	5.0	4	8	9	14	nw.	J. Ed. Hall.
Marshall	Saline	779	25	24.5	-7.2	69	2	-13	10	46	0.50	-1.27	0.20	4.5	6	4	10	17	nw.	Dr. W. H. Black.
Nevada	Vernon	860	22	27.4	-6.5	69	2	-9	8	33	0.70	-1.23	0.50	7.0	3	14	10	7	nw.	Mrs. C. Jewell.
Warrensburg	Johnson	883	37	25.4	-8.4	72	2	-10	8	37	0.21	-1.66	0.10	8.8	6	10	10	11	nw.	Geo. H. Collins.
Warsaw	Benton	715	11	26.7	-8.4	82	2	-19	10	48	0.80	-1.64	0.40	8.0	7	9	12	10	ne.	J. R. Smith, M. D
Section means and extremes				26.4	-7.5	82	2	-19	10	48	0.56	-1.34	1.00	5.8	4	9	8	14	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	30	24.4	-8.0	66	2	-12	29	26	0.52	-1.09	0.30	5.2	4	10	11	10	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	26	18.4	-12.5	60	2	-17	29	54	0.10	-1.45	0.05	1.0	2	4	10	17	nw.	M. H. Moulton.
Chillicothe	Livingston	768	....	......	......	....	....	....	....	....	0.17	......	0.15	1.8	2	11	3	17	se.	Dr. J. R. Campb
Conception	Nodaway	982	31	19.6	-10.1	53	1	-18	29	29	0.35	-0.73	0.20	3.5	3	11	11	9	nw.	Fr. Adelhelm He
Gallatin	Daviess	803	16	......	......	....	....	....	....	....	0.44	-1.18	0.30	4.3	5	8	11	12	nw.	Robert R. Wynn
Grant City	Worth	1,134	23	20.4	-7.6	56	20	-17	29	29	0.25	-1.02	0.15	2.5	2	12	2	17	nw.	W. H. Campbell.
Kansas City	Jackson	963	27	23.4	-8.1	68	1	-9	29	36	0.45	-0.91	0.20	5.3	4	10	9	12	n.	U. S. Weather Bu
Kidder	Caldwell	1,020	25	23.0	-6.5	62	2	-13	29	27	0.27	-1.18	0.20	5.5	3	12	3	16	nw.	J. F. Sharp.
Lexington	Lafayette	688	31	23.6	-8.1	68	2	-10	8†	36	0.54	-1.27	0.27	5.0	4	15	0	16	n.	J. W. Keithley.
Liberty	Clay	864	27	26.1††	-5.8	68	1†	......	......	40	0.50	-0.99	0.30	5.0	2	....	....	....	......	W. C. Wilmott.
Maryville	Nodaway	1,036	25	17.5	-8.8	57	2	-18	30	42	0.45	-0.73	0.20	4.5	5	13	11	7	nw.	J. R. Brink.
Oregon	Holt	1,048	60	19.6	-8.9	58	1	-16	39	27	0.25	-1.27	0.15	2.1	5	7	11	13	nw.	Tom Curry.
St. Joseph	Buchanan	967	11	21.8	......	62	1	-13	29	32	0.16	-0.96	0.12	2.5	5	4	13	14	n.	U. S. Weather Bu
Tarkio	Atchison	976	4	20.0	-5.2	59	20	-16	13†	28	T.	-0.99	T.	T.	0	19	2	10	sw.	John F. Frazier.
Trenton	Grundy	822	21	21.0	-8.8	58	2	-14	29	28	0.17	-1.38	0.11	2.0	2	8	13	10	n.	W. H. Estes.
Section means and extremes				21.2	-8.7	68	1†	-18	19†	54	0.32	-1.10	0.30	3.5	4	10	8	13	nw.	
State means and extremes				25.5	-8.7	82	2	-23	9	54	0.74	-1.40	2.51	7.3	5	11	7	13	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re used in determining section or division means.

Reference letters, ^{a}, ^{b}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacifi No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for December, 1917.

ions.	Watersheds.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
t Plain.																																	
	Missouri								.07	.08	.04			T.			T.													T.		.06	0.25
	Grand								.16	.19							.03			.07										.03		.02	0.50
l	Chariton							.10	.20	.30					T.	.12													.02	.05			0.69
*	Missouri						T.	.28	T.	.14		.01	T.	T.	T.	T.			T.				T.						.01		T.	T.	0.44
	do								.20	.20				.05	T	.07													.02				0.54
	do						.02	.20	.02	.20		.02																	T.	.02	.01	.01	0.50
	Meramec						T.	T.	.40	.10																			T.	1.00		T.	1.50
	Mississippi					T.		.07							.07	.10													.01	T.			0.25
*	do					T.		.10	T.	.09			T.	T.	.05	.23			T										.06		.02		0.55
	Missouri						.01		.22	T.	.18		.02													.01				.04		.02	0.50
ty (‡	do							T.	.28	.12	.10			.01																.03		.04	0.58
	Chariton							.10	.10	.20						T.												.10	.02	.08	T.	T.	0.60
	Mississippi					T.		.12		.03				T.	T.	.08													T.	.05	T.	T.	0.28
	do							.01	.20	.25					.02	.12													.01	.04	.01	T.	0.66
	Chariton																																
	Mississippi						T.		.26		.32																						0.58
	Meramec						T.	.06	.24	.05		T.													.13	T.		T.	.05	.03	T.	T.	0.56
	do						T.		.33		.20		.05												T.				.08	.08			0.74
	Mississippi		T.						.15						.10		.15			.02													0.42
	Grand							.10	T.	.10				T.	T.	.07	T.												T.	T	T.	T.	0.27
	Missouri						.05		.30	.05		.02			T.										T					.02			0.44
***	Mississippi					.01	.02	.36	.03	.19		.01		.04	.01			T.		T.					.01			T.	.08		.02	T.	0.78
	do					.01	.01	.24	.09	.23		.09		.04	.02										.04			.01	.28		.03	.01	1.10
	do																																
	do						T.	.15	T.						.05	.12													T.		.07		0.39
	Meramec						.01		.23		.14		.07						.01							.08				.05		.01	0.60
	Grand						T.		.15	.06				T.	.03		.12								T.					T.			0.36
	Meramec						T.	T	.27	T.	.17		T.	T.	T.	T.										.09			T.	.05		T.	0.58
	Mississippi						.08		.26	.11	.08		T.	.02	.01				T.							.03				.03		.02	0.66
wa***	do		T.			.02		.07		.02					.04	.14			T.										.03		.04	T.	0.36
owlands.																																	
ile	Mississippi			T.				.40	.65	T.		T.		T.					T.							T.			T.			.55	1.60
	Black							.50	.10			.12							.05							.70					T.	.40	1.87
	Mississippi							.27				.10														.20		.10	.04			.05	0.76
	do							.05	.15	.17																	.01		.02			.02	0.42
	do								1.00				.01		.06			.02								.60	.27			.20		.24	2.40
r).	do								.50																						.20		0.70
	Black								.40				.03						T.							.25	.12		T.	.04		.23	1.07
	Mississippi																																
	do							1.07	.58	T.		.14		.06											.08	.13		T.	.12		.07	.06	2.31
on.																																	
	Gasconade							.40			T.		.10							T.										T.	T.	T.	0.50
	Black							.40	.21			T.														.26				T.			0.87
	Osage							.60			.60								.16														1.36
	White																																
	Gasconade																																
	Neosho							.60	.50	T.										.05													1.15
	Osage							.30	.40																				T.			.09	0.79
	Black							.55	T		.30																					.40	1.25
	Meramec							.17	.40	.05		.05													T.	.37			T.	.13		.11	1.28
	Black							.02	.60	.10																.05				.10		.05	0.92
	White								1.40																								1.40
	Gasconade							.20	.60	.05		T.	T.							.50					T.	.05	.15			.05		.15	1.75
	Mississippi						T.		.55		.05		.05	T.												.40		T.		.10		.10	1.25
g	Black			T.				.60	.05	.05		.05						T.								.28				.05		.20	1.28
	Osage								.35	.60																					T.	.05	1.00
	do							.30	.10	.04										T.												T.	0.44
rove	White								.68		T															T.				.07		.08	0.83
	Neosho							2.51		.25															.05							.03	2.84
	do							.65	.06	.10									T.				T.									T.	0.81
	Meramec								.40		.20		.09													T.				.19		.07	0.95
***	White						T.	.93		.17		T.						T.					T.		T.	T.			T.		.08	T.	1.18
	Meramec								.40																					.10			0.50
	Osage								.27		.10		.95																	.03		.06	0.51
Plain.																																	
	Osage							.30	T.	.10	T.	.10						T.										T.					0.50
ty	do							.05	.07	.01	T.	.05		.01					T.		T.								T.	T.	T.	.03	0.22
	do							.20		.20	.15																						0.55
ile	do							T	.18	.07																			T.	T.	T.	.05	0.30
	Neosho							1.00			.20									.10													1.30
	Missouri							.30		.10																			.05		T.	.05	0.50
	do						T.	.10	.20	.05		T.		.05	T.											T.			T.	.05	T.	.05	0.50
	Osage							.50		.10																						.10	0.70
	do																		.07														0.07
ng	Missouri							.10		.04		.01		.02					T.	T.									.01		.03		0.21
	Osage							.40	.10	.10		.05																	.05	.05	T.	.05	0.80
	Missouri								.28	.10	.02			T	.02		T.													.04		.02	0.48
Plateau.																																	
	Grand							.10		.30						.10														.02			0.52
	do					T.		.05		.05				T	T.	T.								T.							T	T.	0.10
	do							.15						.02																			0.17
	Missouri					T.		.10		.20				.05																T.		T	0.35
	Grand					T.		.03		.30				.05	T	.05					.01			T.					T		T.	T.	0.44
***	do						T.	T.	.10	.15			T.	T	T.								T.							T.			0.25
	Missouri							.20		.10		T.	T.			.01		T.	T.	T.			T.	T.					T.		.14		0.45
	Grand							T.		.20				.05															.02		T		0.27
	Missouri								.27	.13							.04															.10	0.54
	do																																
	do						T.	.20	.10		.05				.05		T.									T.			.05	T.	T		0.45
*	do							.04		.15			.02	.02	T.														T.		.02		0.25
	do					T.		.01		.12			T.	.01	T.	T.		T.				T.	T.						.01		.01		0.16
	do																																
	Grand					T		.11		.06			T.	T.		T.												T.	T.		T.	T.	0.17

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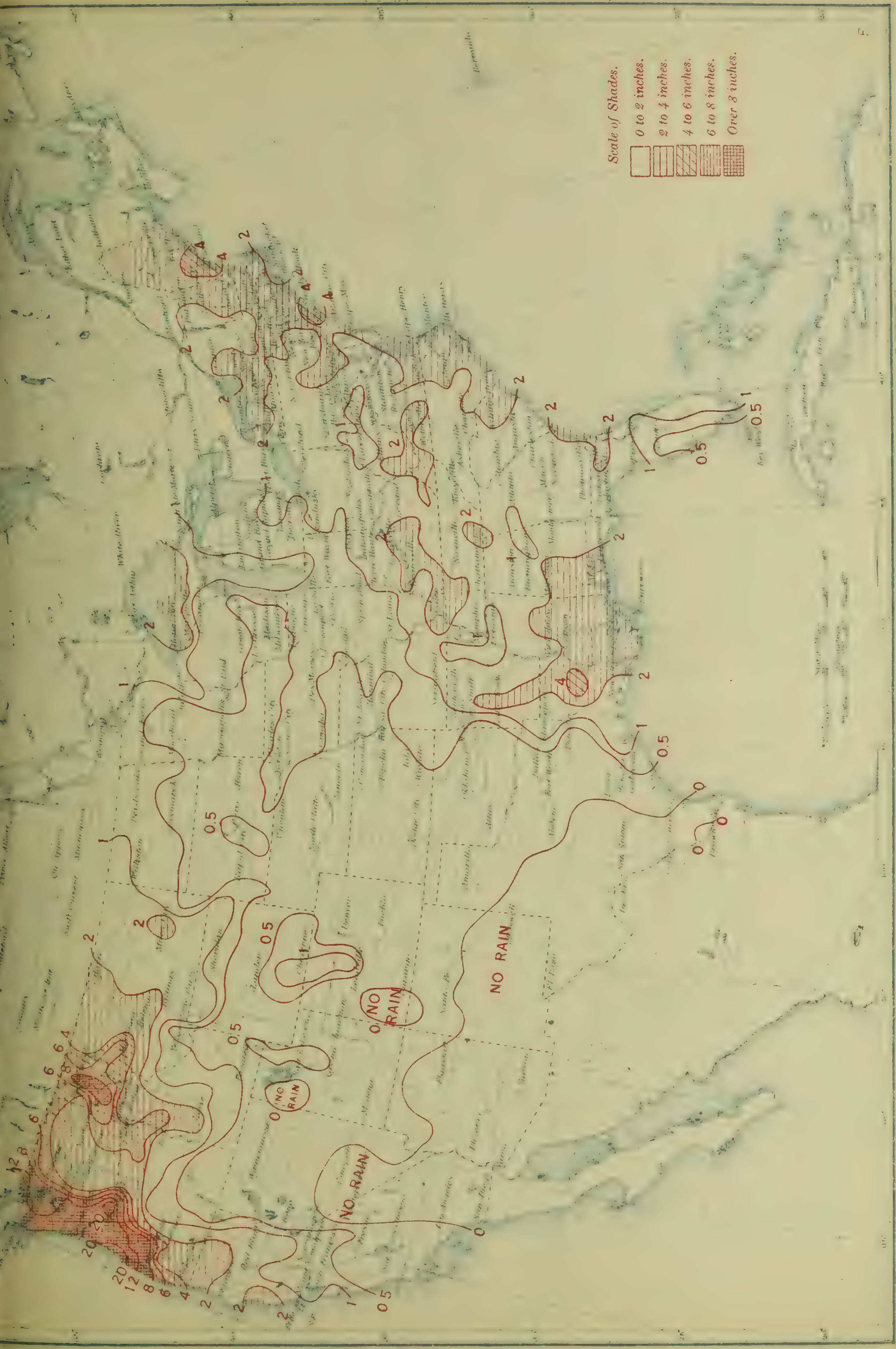
t as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the ervation. ‡ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. * Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate d not recorded.

Daily temperatures for December, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	61	69	50	44	31	20	20	7	8	10	11	30	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	29	31	31	26	30	6	6	10	−9	11	9	1	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	65	72	46	43	40	21	18	14	7	7	16	24	16	11	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	29	43	35	26	21	10	11	9	3	9	3	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	63	70	45	44	34	17	17	16	5	6	16	[illegible]	16	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	27	37	53	27	18	6	10	12	6	13	8	2	[illegible]	[illegible]	1	[illegible]	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	51	66	43	47	31	20	19	14	9	8	15	26	11	9	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	29	39	35	29	20	6	10	−8	−4	10	8	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	66	73	46	47	42	22	20	4	10	16	15	28	7	14	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	27	34	37	29	23	12	12	8	7	10	9	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	52	64	49	44	38	22	14	14	6	10	11	[illegible]	[illegible]	16	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	29	35	51	25	15	1	8	13	6	10	6	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	48	62	62	39	40	23	26	20	15	4	8	18	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	28	32	37	27	20	10	10	5	5	10	15	[illegible]	[illegible]	1	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mexico §§	Maximum	60	72	45	48	33	21	18	6	12	12	15	[illegible]	10	14	15	31	[illegible]	41	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	41	21	[illegible]	[illegible]	[illegible]
	Minimum	25	28	36	26	21	7	9	10	5	11	10	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	60	72	66	47	37	34	20	18	10	11	11	[illegible]	21	[illegible]	[illegible]	[illegible]	11	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	28	45	[illegible]	28	24	13	14	5	8	10	1	[illegible]	−2	1	1	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	51	65	[illegible]	45	39	25	17	15	8	8	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	39	41	[illegible]	32	16	3	11	12	9	15	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	57	66	60	42	36	36	23	18	10	12	14	21	23	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	36	41	38	34	28	16	15	2	9	1	[illegible]	1	[illegible]	[illegible]	7	11	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum	52	60	46	37	36	14	16	0	2	6	17	21	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	30	32	32	26	14	0	0	−14	15	10	10	7	10	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	59	70	44	43	35	19	18	8	9	8	14	20	8	11	17	[illegible]	[illegible]	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22
	Minimum	30	34	36	27	21	10	7	−8	8	10	8	[illegible]	4	5	4	6	11	15	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	21	12	15	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																																
Caruthersville	Maximum	78	75	62	55	57	45	32	30	25	20	18	[illegible]	25	27	30	30	[illegible]	[illegible]	[illegible]	60	48	55	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]
	Minimum	32	46	45	41	33	29	22	8	9	2	9	1	[illegible]	[illegible]	10	10	17	34	29	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	68	67	61	48	51	48	29	25	20	17	15	[illegible]	[illegible]	23	22	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	30	40	43	27	27	29	20	5	16	1	9	[illegible]	8	7	10	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]
Jackson	Maximum	59	65	63	47	48	40	25	23	15	10	16	21	20	18	20	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	28	44	40	35	25	22	16	4	−23	21	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	62	72	62	53	48	42	25	22	17	15	19	21	26	24	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	27	34	40	35	25	23	16	6	11	12	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Poplar Bluff §§	Maximum	65	70	51	55	54	38	27	16	22	19	19	28	[illegible]	28	[illegible]	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	21	[illegible]
	Minimum	27	27	47	40	26	31	18	11	0	5	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	25	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]
Ozark Plateau.																																
Birchtree	Maximum	69	70	60	52	50	43	25	20	16	23	19	28	23	23	[illegible]	[illegible]	37	44	44	[illegible]	[illegible]	[illegible]	[illegible]	54	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	30	40	38	32	28	22	18	−2	14	7	7	[illegible]	3	1	10	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eldon	Maximum	69	65	74	69	44	22	13	15	12	11	18	21	16	11	21	[illegible]	42	42	[illegible]	[illegible]	[illegible]	41	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23
	Minimum	27	35	38	35	14	9	13	14	−3	10	[illegible]	6	9	−1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	−11	[illegible]	[illegible]	[illegible]
Fruit City	Maximum	65	71	61	51	50	13	24	22	12	20	19	25	23	21	22	[illegible]	[illegible]	43	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	31	41	37	32	25	19	15	2	6	−8	3	1	3	3	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gano	Maximum	65	71	62	42	41	57	33	18	14	14	18	21	22	15	15	[illegible]	40	44	47	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	32	46	35	27	24	10	9	−6	10	−11	2	1	−5	−1	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hollister	Maximum	56	60	56	46	46	48	42	25	15	20	16	2[illegible]	16	20	34	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12
	Minimum	[illegible]	40	38	34	28	24	24	14	6	0	4	[illegible]	4	6	10	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ironton §§	Maximum	63	70	55	49	47	34	22	14	14	18	15	30	15	20	15	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	25	34	39	29	19	21	14	0	13	8	0	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	37	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Koshkonong	Maximum	74	71	63	54	51	40	27	22	20	22	17	32	19	25	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	62	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	34	49	39	32	35	25	21	1	10	−4	6	3	8	6	5	6	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lebanon §§	Maximum	78	72	48	48	47	24	24	13	14	15	13	32	12	15	35	[illegible]	[illegible]	12	47	[illegible]	[illegible]	[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	37	38	36	27	24	17	10	−7	10	13	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]
Mountain Grove §§	Maximum	64	68	51	49	48	24	21	5	13	22	10	28	20	12	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	30	21	14	14	6	−5	[illegible]	[illegible]
	Minimum	39	42	36	29	29	19	15	0	12	8	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	22	[illegible]
Neosho	Maximum	71	73	66	49	51	46	30	24	17	17	26	37	32	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26	31	12	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	34	56	37	33	24	19	21	−8	23	−12	0	−6	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rolla §§	Maximum	70	72	45	50	53	24	20	5	10	13	18	34	10	17	22	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	30	30	37	30	26	16	13	−5	−9	−10	−8	1	−3	−4	5	[illegible]	7	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37	42	15	[illegible]	[illegible]	[illegible]
Springfield	Maximum	68	71	54	46	47	26	24	13	14	18	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	40	51	34	33	24	14	13	−9	−8	−4	7	6	−4	5	10	[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southwest Plain.																																
Amoret	Maximum	69	76	61	47	49	36	21	15	10	9	20	30	25	15	25	37	37	37	45	52	47	43	45	57	40	48	41	[illegible]	9	[illegible]	[illegible]
	Minimum	26	52	33	22	21	8	14	−9	−9	7	2	−3	−7	−2	5	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Appleton City	Maximum	68	70	62	50	47	42	22	16	15	10	22	31	25	16	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	33	51	36	27	25	16	16	−8	7	−7	3	1	−5	[illegible]	[illegible]	16	20	[illegible]	[illegible]	[illegible]	36	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−6	[illegible]	[illegible]
Clinton	Maximum	69	72	66	50	50	23	22	7	11	10	23	[illegible]	[illegible]	12	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	30	48	35	32	23	10	15	−5	7	−10	0	0	−6	−2	7	11	18	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	21	14	[illegible]	[illegible]	7	−2	12
Harrisonville §§	Maximum	66	68	45	45	46	21	19	12	8	11	18	28	9	12	24	35	39	39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]
	Minimum	29	28	34	24	20	8	9	−9	10	−12	−4	−1	−7	[illegible]	0	9	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	12	[illegible]	[illegible]	[illegible]	[illegible]
Lamar §§	Maximum	72	72	52	50	50	27	22	15	15	20	23	31	13	21	26	[illegible]	36	[illegible]	[illegible]	44	40	[illegible]	62	45	34	40	[illegible]	15	15	30	[illegible]
	Minimum	30	34	37	28	26	14	22	−9	−12	16	5	1	−1	2	[illegible]	[illegible]	20	32	37	40	[illegible]	36	42	45	26	[illegible]	[illegible]	7	−3	[illegible]	17
Lamonte	Maximum	68	71	60	47	42	31	18	15	7	8	18	31	19	12	21	[illegible]	40	39	44	54	48	43	47	50	29	48	41	30	7	26	24
	Minimum	29	40	33	20	17	8	12	−10	−10	−17	12	[illegible]	−9	−2	5	2	19	31	35	40	34	14	21	28	19	21	30	4	−10	12	12
[illegible]	Maximum	66	69	50	45	40	34	19	15	7	7	14	25	20	11	18	55	49	40	46	52	47	45	57	55	27	37	43	30	5	25	21
	Minimum	29	39	33	27	20	14	8	9	−8	13	4	−1	7	3	11	33	16	31	35	38	34	21	38	24	17	12	27	3	−10	−5	11
Warrensburg	Maximum	68	72	[illegible]	46	43	[illegible]	18	16	8	9	22	32	25	13	24	33	41	39	45	53	47	45	57	50	26	40	42	26	6	27	23
	Minimum	31	42	24	27	20	7	14	10	5	9	1	5	9	2	5	12	22	33	35	46	34	27	41	26	18	11	26	4	−9	−3	12
Warsaw	Maximum	56	52	45	48	50	46	24	17	11	12	20	33	28	15	14	43	47	48	52	58	47	50	63	56	30	40	47	39	6	30	26
	Minimum	28	45	37	27	17	11	15	−8	−10	−19	−3	−12	−6	−1	4	1	9	29	35	36	36	22	10	28	25	13	31	6	−7	−8	15
[illegible]																																
[illegible]	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
[illegible]	Maximum	40	55	48	40	36	26	22	[illegible]	1	12	25	28	13	10	11	38	40	45	51	56	47	43	[illegible]	45	25	30	29	15	1	25	25
	Minimum	30	56	[illegible]	34	17	[illegible]	10	15	−12	−11	7	1	−12	5	0	5	20	[illegible]	32	31	25	22	[illegible]	18	9	10	15	−6	−17	−1	7
[illegible]	Maximum	48	61	[illegible]	45	34	18	14	7	8	8	19	29	8	10	23	39	39	40	41	56	38	46	56	50	24	37	40	7	6	27	23
	Minimum	[illegible]	[illegible]	[illegible]	40	18	9	1	7	1	1	2	3	−6	5	7	19	26	33	35	37	33	31	15	20	15	11	7	−2	−9	2	13
[illegible]	Maximum	[illegible]	62	42	43	[illegible]	18	15	15	7	7	18	33	6	7	15	36	26	38	46	56	42	17	52	37	26	32	41	22	7	22	20
	Minimum	32	41	[illegible]	30	20	2	14	11	1	11	1	6	10	2	7	9	12	33	34	39	32	31	42	32	11	12	30	2	−13	7	9
[illegible]	Maximum	44	[illegible]	50	46	31	18	18	7	[illegible]	8	18	25	10	13	16	35	38	38	45	53	38	12	56	11	28	35	12	8	9	26	20
	Minimum	[illegible]	[illegible]	31	46	40	6	15	10	[illegible]	7	1	7	7	2	4	12	13	33	35	36	33	21	31	10	17	12	27	3	−10	−1	11
[illegible]	Maximum	[illegible]	[illegible]	41	40	19	16	16	4	2	[illegible]	18	28	5	6	19	10	38	50	52	57	40	12	49	25	27	32	32	0	11	24	22
	Minimum	34	33	[illegible]	24	15	[illegible]	[illegible]	17	16	11	11	7	15	16	−9	3	31	29	30	30	28	22	21	22	11	9	9	−7	−17	−18	4
[illegible]	Maximum	[illegible]	[illegible]	41	40	30	19	16	3	1	1	15	25	[illegible]	[illegible]	11	37	40	48	50	54	37	41	50	45	25	32	32	5	5	21	22
	Minimum	[illegible]	[illegible]	41	21	14	1	[illegible]	11	[illegible]	11	6	4	3	1	1	19	26	32	31	31	29	23	37	17	10	11	5	−6	−16	−3	7
[illegible]	Maximum	[illegible]	[illegible]	42	43	29	18	18	6	6	6	24	31	1	7	17	19	39	19	50	58	39	11	51	16	27	32	35	3	8	26	23
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	3	−9	3	7	1	1	10	6	6	17	29	34	31	38	32	29	11	20	11	13	3	−3	13	3	9
[illegible]	Maximum	[illegible]	[illegible]	46	44	[illegible]	[illegible]	18	11	6	8	16	26	9	8	15	30	36	37	45	53	39	13	52	16	26	32	39	15	2	21	22
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	3	9	1	[illegible]	9	1	3	7	16	32	33	31	32	27	38	22	11	13	11	−2	11	−1	12

[illegible] days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8
12
20

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	14	0.50	−1.06	0.40	1.5	2	18	1	12	....	Wm. R. Bennett.
Boonville	40	0.25	−1.75	0.08	2.5	4	12	1	18	nw.	C. Randecker.
Cape Girardeau	10	1.20	....	0.60	12.0	6	6	1	24	n.	D. L. Albert.
Glencoe	0	1.50	....	1.00	1.5	3	9	7	15	n.	Vint R. Neel.
Hermann	43	0.39	−1.34	0.22	7.0	7	8	5	18	e.	C. T. Mansmund.
New Madrid	23	2.40	−1.82	1.00	12.5	8	8	1	22	ne.	Miss Josie Smith.
Osceola	17	0.07	−2.83	0.07	......	1	..	.	.	......	Wm. L. Mathews.
Pacific	0	0.71	....	0.33	......	5	6	8	17	......	R. C. Dougherty.
Steelville	15	0.50	−1.34	0.40	......	2	13	0	18	n.	Wm. J. Drennen.
Tuscumbia	0	0.51	....	0.27	......	5	14	1	16	n.	C. B. Wright.
Union	0	0.60	....	0.23	8.0	8	11	3	17	sw.	J. Wm. Keller.
Valley Park	0	0.58	....	0.27	6.6	4	10	0	21	nw.	H. J. Loehnerger.
Waverly	2	0.48	....	0.28	3.2	2	15[a]	4[a]	11[a]	se.	J. W. Cauthorn.

U. S. DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU.
C. F. MARVIN, Chief.

NOTES ON THE CLIMATE OF FRANCE AND BELGIUM.

By Preston C. Day.

[*Advance sheets from* Monthly Weather Review, October, 1917.]

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1917.

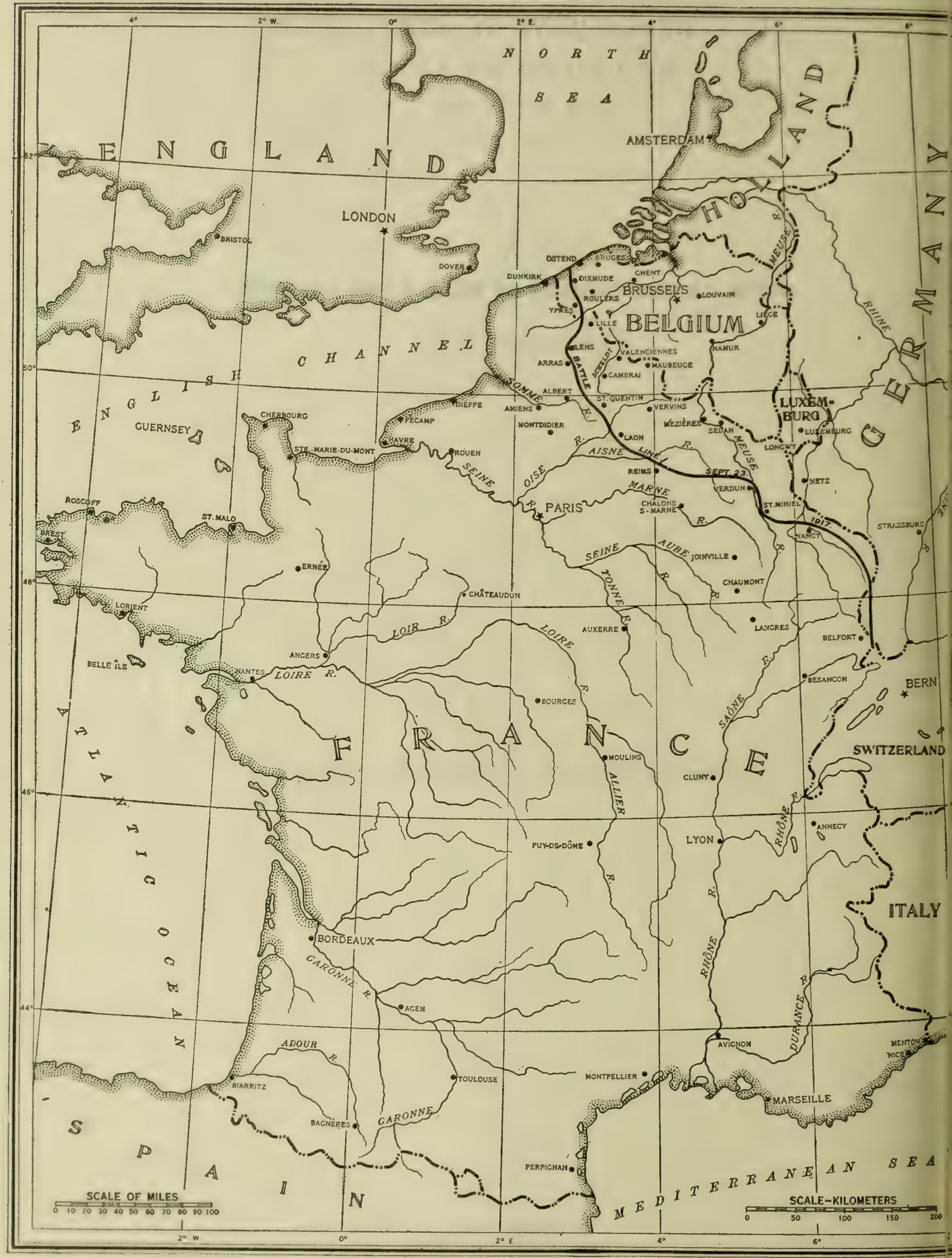


FIG. 1.—Map of France and Belgium, showing rivers, localities referred to in accompanying tables, and approximate battle line on September 23, 1917.

[Advance sheets from MONTHLY WEATHER REVIEW, October, 1917.]

NOTES ON THE CLIMATE OF FRANCE AND BELGIUM.

By PRESTON C. DAY, Climatologist and Chief of Division.

[Climatological Division, Weather Bureau, November 12, 1917.]

Introduction.

present interest of the people of the United s in matters pertaining to Europe has extended to ions of climate and the probable effect of the weather the health and comfort of those who have been or nay be called for service in France and Belgium.

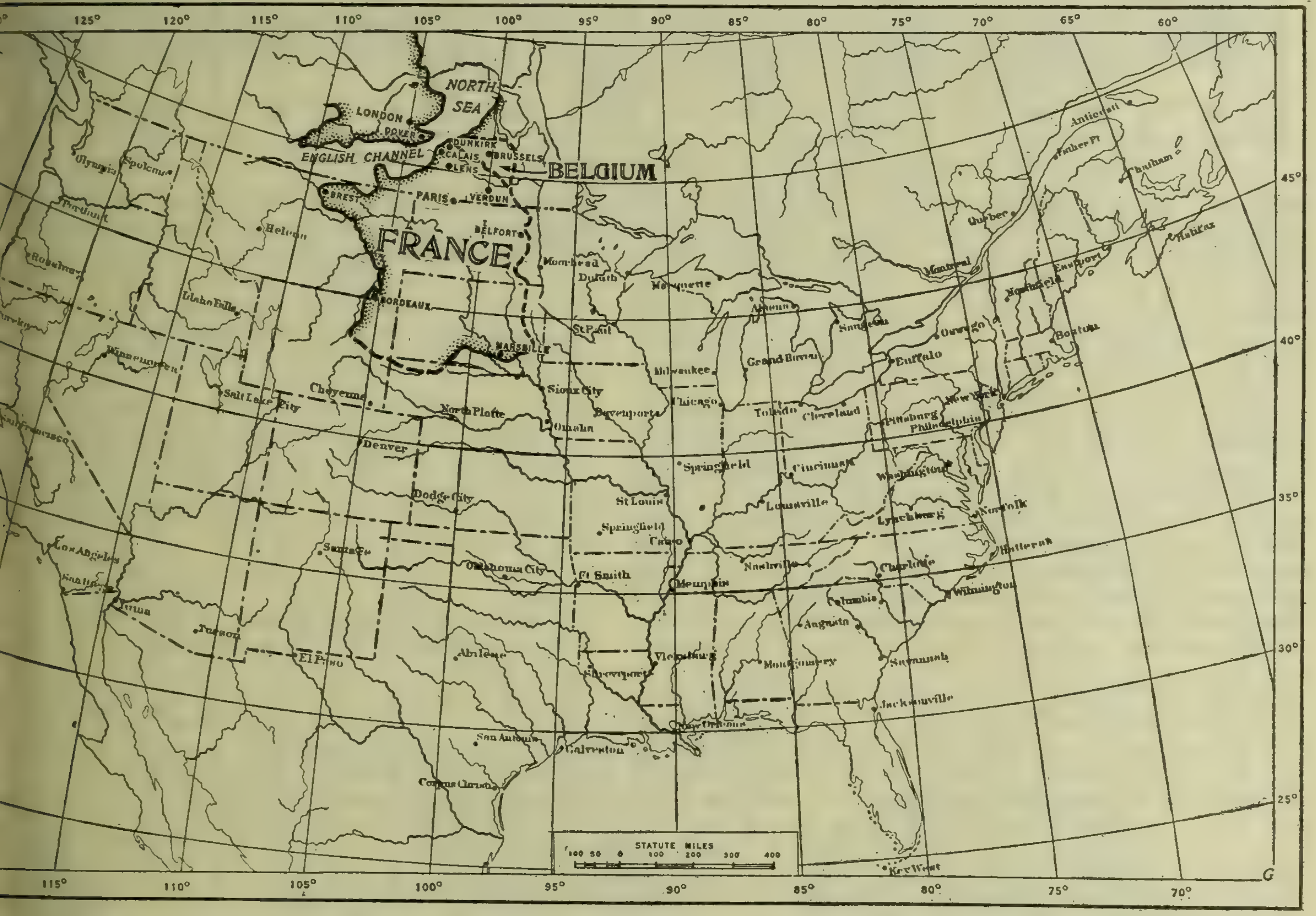


FIG. 2.—Map comparing the relative areas and geographic latitudes of France-Belgium and the United States of North America.

rous inquiries relating to weather conditions usu- xperienced in those countries have been received, seems proper to present to the public at this time ription of their more important climatic features. re is generally shown on the part of the inquirer a for comparisons between weather here and there, ent data have been included to permit of such risons being made.

graphical position.—France and Belgium together y that portion of the western coast of Europe exg from north latitude 42° 20′ to 51° 20′, which ponds nearly to the portion of the American coast between Boston and the northern end of Newfoundland. In longitude they extend from 4° 42′ west of Greenwich to 7° 30′ east. Their outlines and some of the more important topographic features, including river systems, and locations of various towns are shown on figure 1.

The geographical location of France and Belgium with respect to latitude and their areas as compared with the United States are shown on figure 2, where their outlines are superposed on a chart of the United States and portions of Canada. By referring to this chart it will be seen that in latitude these countries lie largely to the north of the United States. Marseille, the most southerly important city of France, is seen to be farther north than Boston, while Paris is nearly 500 miles farther north than Chicago. Brussels, in latitude 50° 51′, is more than 50 miles farther north than Winnipeg, Canada, or in the same latitude as the southern portion of Hudson Bay. The difference in longitude is such that local time at Paris is approximately five hours later than at New York, that is, when it is noon at New York it is

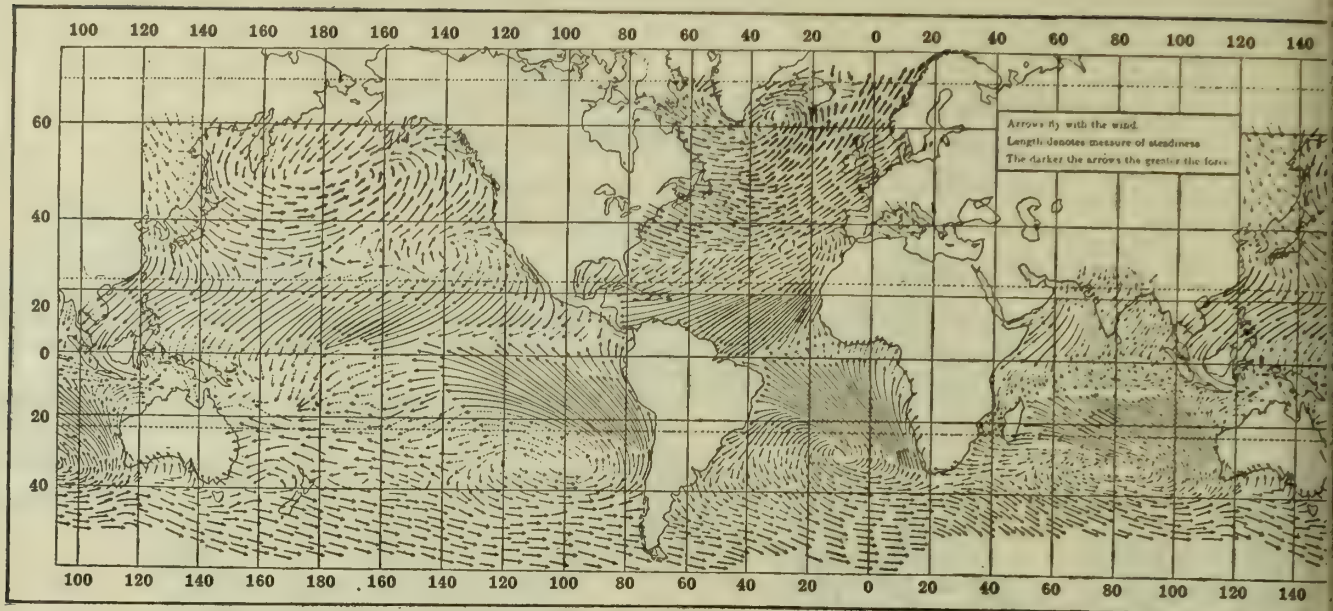

100 120 140 160 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
60
40
20
0
20
40
Arrows fly with the wind.
Length denotes measure of steadiness.
The darker the arrows the greater the force.

FIG. 3.—Chart of ocean winds in January and February, showing normal directions, relative velocities, and constancies. (Koeppen.)

already 5 p. m. at Paris; six hours later than at St. Louis; seven hours later than at Denver, and eight hours later than at San Francisco. Thus during the longer days of the year as the sun is setting on our western coast it is rising on the following day in eastern France.

Area and topography.—The area of France is slightly less than 210,000 square miles, that of Belgium is about 11,000 square miles, and the combined area of the two countries about equals that of the States along our Atlantic seaboard from North Carolina to New England, inclusive.

The northwestern half of France and practically the whole of Belgium consists principally of low plains and shallow, open valleys, gradually rising from sea level on the west coast toward the interior, with few elevations exceeding 1,000 feet. The eastern and southeastern portions of France are considerably broken, the land rising in the north portion toward the Ardennes, a series of hills and low mountains in southeastern Belgium and
northeastern France, with occasional elevations o
feet or more near the German (Alsatian) frontier
ther south the Vosges, forming a portion of the
ary between France and Germany, rise to elevat
5,000 feet or more, while along the borders of S
land and Italy the Jura and outlying peaks of th
attain elevations somewhat greater. Along the
between France and Spain some of the higher pe
the Pyrenees reach elevations of more than 10,000

Important rivers, a number of which are naviga
considerable distances, drain both France and Be
which, together with the extensive systems of co
ing canals, afford water transportation to large a
the inland region.

Climate.

France and Belgium, located as they are, in the
of the eastward drift of the atmosphere, afford in

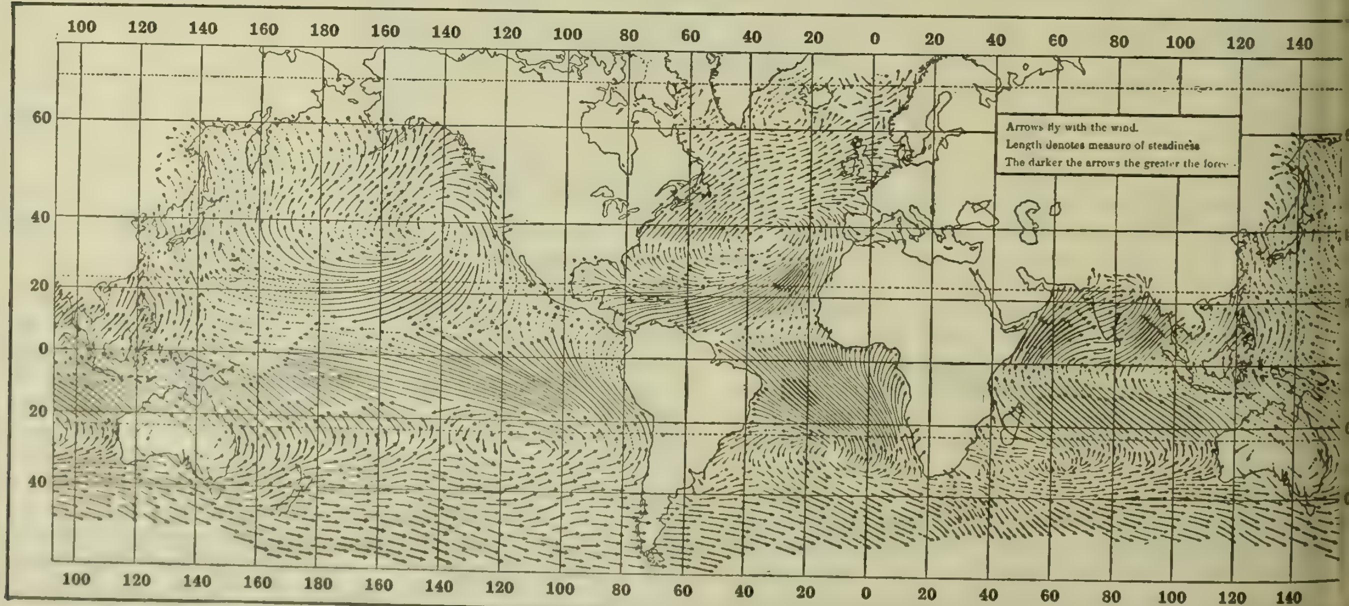

100 120 140 160 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140
60
40
20
0
20
40
Arrows fly with the wind.
Length denotes measure of steadiness.
The darker the arrows the greater the force.

FIG. 4.—Chart of ocean winds in July and August, showing normal directions, relative velocities, and constancies. (Koeppen.)

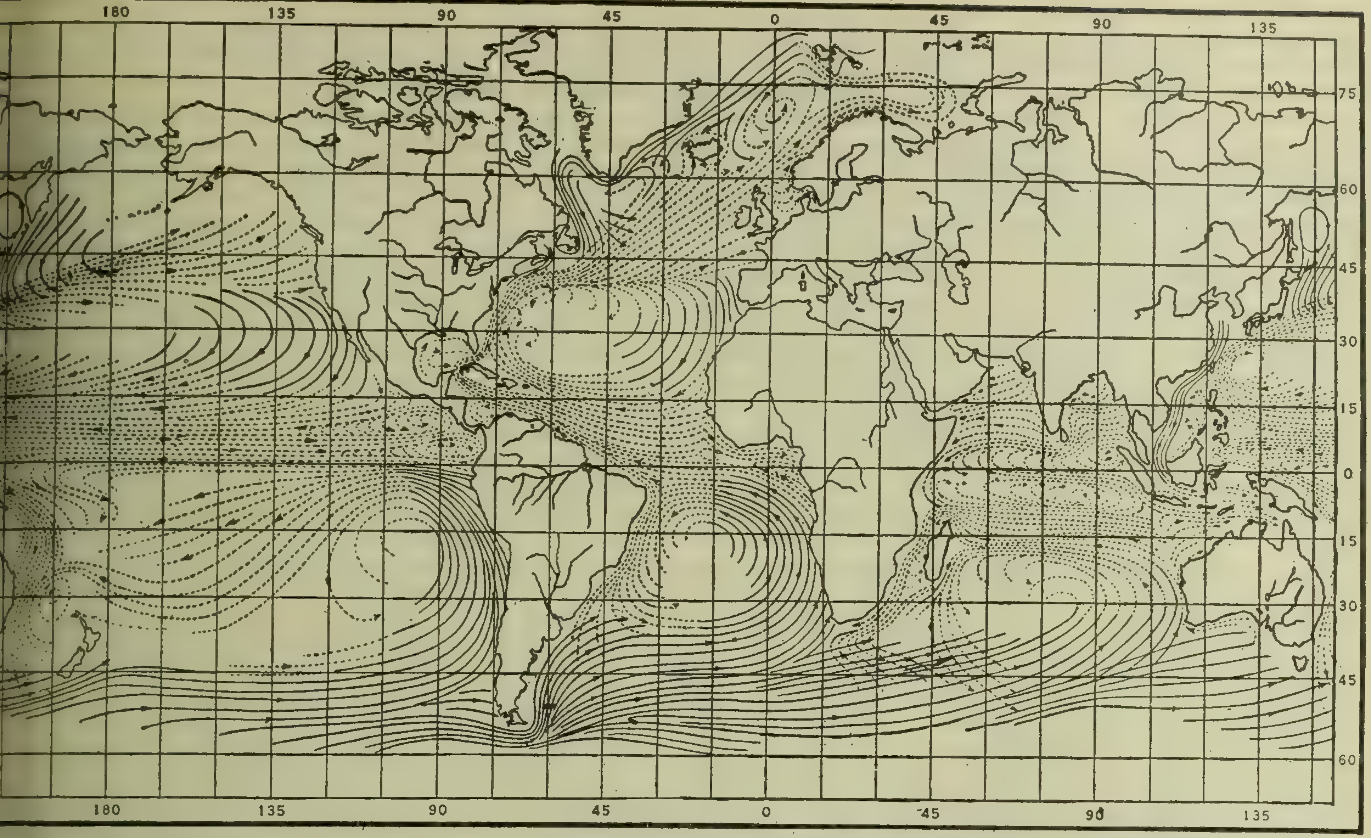


FIG. 5.—Chart of average annual ocean currents. Warm currents indicated by dotted arrows; cooler currents by continuous arrows.

te an excellent example of the modifying influences
ed upon land areas by the proximity of large bodies
ter to their western borders. Water surfaces warm
y under the direct rays of the sun and also cool
y in the absence of direct solar radiation, resulting
comparatively uniform temperature condition.
marine influence is felt in varying degrees over
surfaces adjacent to large bodies of water, its
cy and distance reached inland depending on the
ion and strength of the surface drift of the atmos-
and the topography of the land. Both the situa-
and topographic features of France and Belgium
avorable for the marine influence to be felt in a
measure over the greater portion of both countries,
revailing winds (see figs. 3 and 4) being from off
cean and with no mountain barriers materially to
uct their passage to the interior.

e general drift of ocean waters likewise contributes
rially to the modification of climate over the adjacent
areas. There are a number of extensive ocean cur-
which carry large amounts of water for long dis-
s. When these currents have poleward directions
carry relatively warm water into colder regions, and
their flow is equatorward the reverse is true. The
Atlantic Drift, originating in the so-called Gulf
m, transports relatively warm water from the Gulf
exico and adjacent regions into the northeastern
on of the Atlantic Ocean, and the normal westerly
blowing over these waters carry their warmth to
djacent land, thus tending to modify further the
te of western Europe. It is of interest to note that
Brest, on the western coast of France, has about
ame latitude as Devils Lake, N. Dak., the average
ary temperature at Brest under these marine in-
ces is 44° F., while at Devils Lake (under continental influences) it is about 0° F. Greater variations are shown in the extremes, where for the vicinity of Brest the lowest observed winter temperature probably does not reach 0° F., while readings of nearly 60 degrees below 0° F. have been observed in the vicinity of Devils Lake. On the other hand, owing to the less rapid cooling of the ocean waters as compared with the land, the ocean winds of summer are cooler than those from the land, and in July the average temperature of Brest is only 64° F., while at Devils Lake it is about 68°.

The general surface drift of the atmosphere over the several oceans in Winter and in Summer is shown by figures 3 and 4, and figure 5 shows broadly the movement of ocean waters. It will be noted from these charts that in the North Atlantic Ocean between Europe and the United States the normal direction of movement for both air and ocean water is northeastward, or toward the European coast.

Temperature.—The outstanding features of the temperature of the countries of western Europe are the comparatively warm winters for such high latitudes, and the relatively cool summers. Along the coasts of northern France and of Belgium temperatures are very similar to those experienced on our own northern Pacific coast, the average monthly temperatures at Dunkirk, France, and at Seattle, Wash., being identical for nearly half the months of the year and differing only slightly for the other months. Farther south over the Atlantic coast districts of France the temperatures throughout the year resemble those of the coasts of southern Oregon and northern California, and during the winter months the averages are not materially different from those of the Carolina and Georgia coasts, but in the latter districts temperatures have a greater variation from day to day and the extremes are decidedly more pronounced. The

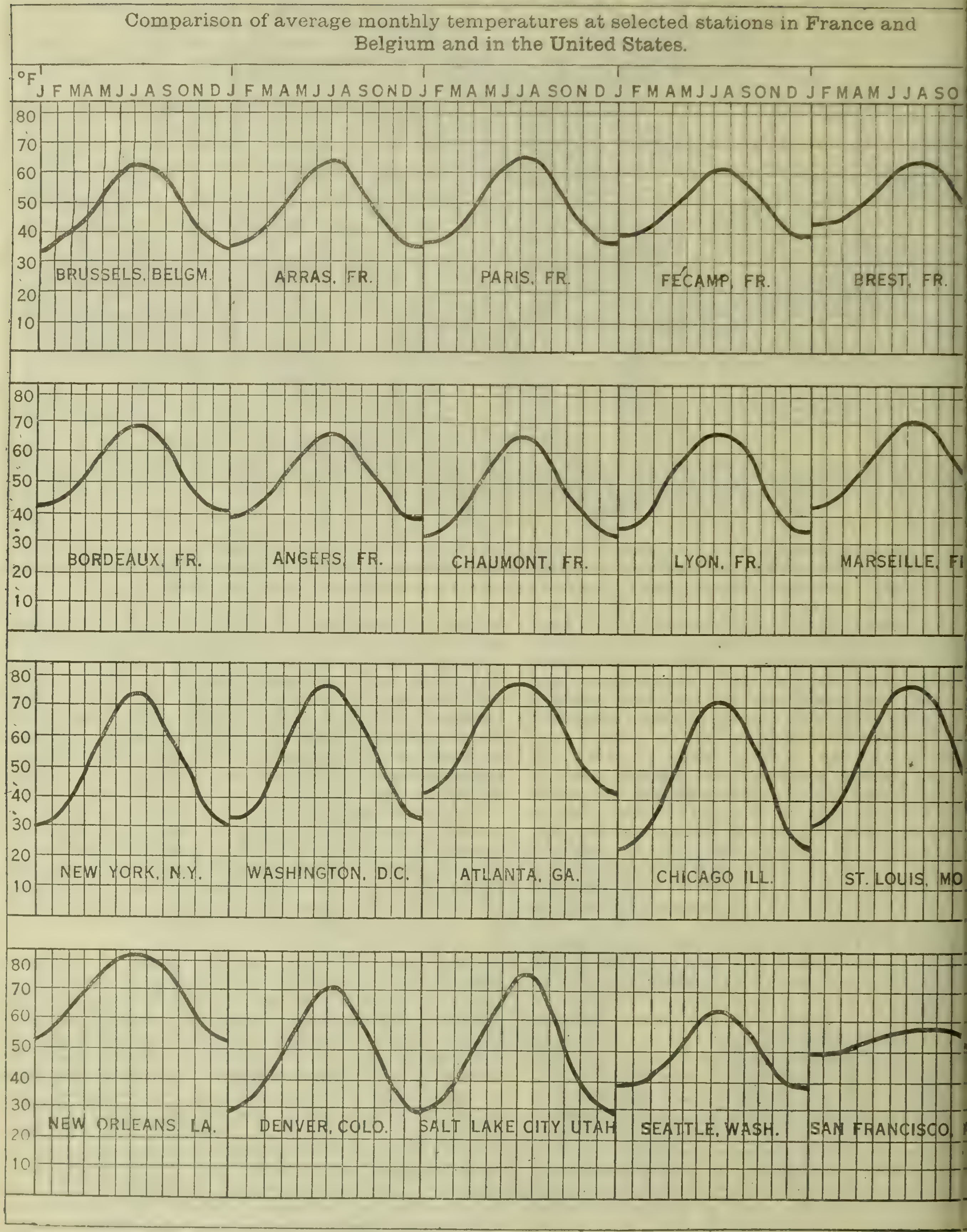


FIG. 6.—Synoptic chart of annual temperature marches at selected stations in France, Belgium, and the United States.

ence of mountain barriers affords the prevailing ocean ids free passage from the coast districts to the interior hese countries; the modifying influences of these ocean ds thus extend far inland, and we find at Paris, for ance, temperature conditions not materially different n those near the coast, nearly 200 miles to the west- rd.[1]

Over the more eastern districts, where the broken ography and greater elevations interfere with the rse of the westerly winds, they no longer exert the ng influence apparent at the lower elevations to the tward, and here we find temperatures showing much er ranges and conforming more to continental con- ons, although the extremes are still far less pronounced n would be expected, considering only the high latitude he country. Figure 6 presents annual temperature es for both continents and helps this comparison.

able 1 shows for a considerable number of stations ributed throughout France and Belgium the average thly and average annual temperatures, while figure 6 vs graphically similar values for selected points in those atries and in the United States, from which comparisons veen different portions of the respective countries can nade. It will be noted by referring to the table and hs that the chief characteristic of the temperature rance and Belgium is uniformity throughout the year, he absence of extremely cold weather in winter and nded hot weather in summer. The average tempera- for the coldest month, January, in the interior of hern France is a few degrees above freezing, corre- ding closely to that experienced at about the latitude outhern Missouri and central Virginia in our own try. However, at the latitude named in the United es the fluctuations in temperature from day to day usually much greater (except on the Pacific coast) ng the winter season than in northern France, and minima usually go considerably lower.

inter in northern France is not severe from the stand- t of low temperatures, but there is a constancy of erately cold weather which is not usually experienced e United States. Table 2 shows for selected stations rance and in the United States the average daily imum and minimum temperatures, and Table 3 vs for a number of selected points in France the high- nd lowest temperatures of record, while Tables 4 and ow the average number of days with minimum tem- ture as low as or lower than 32° F., and the average ber with the temperature continuously below 32° F. ughout the day. From Tables 4 and 5 it will be that at Arras near the northern end of the battle (fig. 1) in January about two-thirds of the days on average have minimum temperatures as low as ing or lower and, as a rule, about five days of that th have temperatures continuously below freezing. the Mediterranean coast the winters are delightful, average January temperature being about 45° F. and ing weather infrequent. Rather low temperatures etimes occur in northern France, but such extremely weather as is occasionally experienced in the in- r and northern portions of the United States is un- wn. The coldest weather of record in that region es from about 0° F. to −10° F. In the United es "zero weather" has occurred on the central Gulf t and −10° F. in the northern portions of the central Gulf States, while along the north-central border of the United States, which corresponds closely with the latitude of France (fig. 2), temperatures from 50 to 60 degrees below 0° F. are of record, and the average of the lowest winter temperature is about −35° F.

Summer in northern France and Belgium is cool, as compared with most of the United States, the average temperature for July and August, the warmest months, being 63° to 65°, even lower than along our northern border. Moderately hot weather sometimes occurs, but extremely high temperatures, such as are occasionally experienced in much of this country, are unknown in France and Belgium. It will be noted from Table 3 that in most of northern France and in Belgium temperatures as high as 100° F. have never been reported, while in the United States 100° to 110° have occurred generally, except in the higher mountain districts and along portions of the coasts. The daily maximum temperatures in northern France and Belgium in midsummer are usually less than 80° and the minimum less than 60° F.

Precipitation.—Table 6 shows for a number of well-distributed stations in France and Belgium, the average monthly and annual precipitation. At the lower elevations the annual precipitation ranges between 20 and 30 inches, but at the higher altitudes, especially at the western extremity of the Pyrenees at the south of France and in the Vosges in eastern France the annual precipitation reaches 60 to 70 inches. The rainfall is rather equally distributed throughout the year, but the maximum amounts occur in the Fall and early Winter and the minimum in the spring months. On the Mediterranean coast rainfall is comparatively heavy during the winter season, but during the summer it is usually very light.

Figure 7 shows graphically for a number of selected stations in France and the United States the average monthly precipitation, permitting comparisons between different portions of the respective countries. Not considering the higher mountains, rainfall in the eastern half of the United States, especially in the South, is much greater than in France and Belgium. Compared with Paris, the average annual rainfall at Chicago is one and one-half times as large; at New York, more than twice as large, and at New Orleans nearly three times as large.

The outstanding feature of rainfall in France and Belgium, when the relatively small totals as compared with the eastern half of the United States are considered, is the frequency of its occurrence. For example, while the average annual rainfall at New Orleans is nearly three times as much as that of Paris, Table 7 shows that rain falls with considerably greater frequency at Paris than at New Orleans. Rainfalls of moderate amounts, 0.25 to 1.00 inch in 24 hours, occur with about as great frequency in France and Belgium as in much of the United States (Table 8), but heavier falls, more than 1.00 inch in 24 hours, rarely occur (Table 9). It will be noted that at Arras, in northern France, only one day had rainfall greater than 1.00 inch during the entire 5-year period from 1907 to 1911, inclusive, while at New Orleans for the same period, amounts of this magnitude were recorded on 63 days.

Snowfall.—In Belgium and over the lowlands of northern France snow is fairly frequent and may be expected from November to April, inclusive, although on account of the rather light character of the precipitation and the moderate temperatures, it rarely attains any considerable depth on the ground. At the higher elevations of eastern and southeastern France, particularly in the mountains bordering on Germany and Switzerland where the winters are long and cold, snowfall is more frequent and much heavier and in some places accumulates to considerable depths. At Brussels snow usually occurs on about 25 days during the year, in the vicinity of Paris snow may be expected on about 15 days, while along the English Channel it probably occurs, as a rule, on less than 10 days.

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[1] rude comparison between the severity of the winters at Paris and Washington was published in the MONTHLY WEATHER REVIEW, November, 1914, 42:626-9. , jr.

The average number of days with snowfall for each of the winter months and the year at a few selected points in Belgium and northern France, is shown in Table 12, and there compared with points in the United States.

Cloudiness.—The average cloudiness for each month of the year is given for selected stations in France and Belgium and in the United States in Table 11, from which comparisons as to this phase of the weather can be made. The amount of cloudy weather in France during the warm season of the year does not differ materially from that in much of our own country, but in winter much more cloudy weather is experienced than in most of the United States, this being especially true in northern France and in Belgium. It will be noted from the records for Nice, Marseille, and Montpellier, that there is abundant sunshine in the Mediterranean coast districts at all seasons of the year.

SUMMARY.

From the standpoint of bodily comfort, the climate of northern France and Belgium may be briefly summarized as follows: The winter weather is rather rigorous and unpleasant, due to the persistence of comparatively low temperatures, much cloudiness and frequent rain and snow. The winds blow mostly from the west or southwest and are frequently damp and chilly, the relative humidity being rather high. The winter nights are long and the days correspondingly short. In the extreme northern portion of France, near the present battle line, the sun sets during the latter half of December a few minutes before 4 p. m., and rises about 8 a. m., making the nights, sunset to sunrise, about 16 hours long.

With the transition from Winter into Spring, the rapid warming up familiar to residents in most sections of the United States, is not so noticeable in France and Belgium, the average temperature for March being only 2 to 4 degrees (F.) higher than for February. April and May are moderately cool and not unpleasant, the length of the day increases much more rapidly than in most sections of the United States, and there is a correspondingly large increase in the amount of sunshine, while rainfall is comparatively light, although occurring rather frequently.

The Summers are pleasant as compared with much of the United States, the day temperatures being mostly moderate and the nights cool. Occasionally hot weather is experienced, but the heat is not excessive and the heated periods are usually of short duration. During the latter part of June the days in northern France and Belgium are more than 16 hours long, the sun rising a little earlier than 4 a. m. and setting after 8 p. m.

Fall also is usually pleasant, especially during September and October, the temperature during these months being, as a rule, considerably higher than for the corresponding spring months. With the advent of Fall the rainfall usually becomes heavier, resulting more from greater intensity of falls than from increased frequency. This usually is the season of maximum rainfall.

TABLE 1.—*Average monthly temperatures (°F.) for 39 localit France and 4 in Belgium.*

[For locations see map, figure 1, p. [2].]

Station and dates.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Dunkirk (1881–1900)	39	40	42	47	52	58	63	63	60	52	44
Lille (1851–1900)	36	38	41	48	54	60	63	63	58	50	42
Arras (1876–1900)	35	37	41	48	54	60	63	63	57	49	41
Mézières (1883 1900)	35	37	41	49	55	62	65	64	58	50	41
Paris (1871–1900)	36	39	43	50	56	62	65	64	59	50	43
Rouen (1851–1900)	37	39	42	49	55	61	64	63	59	51	43
Dieppe (1873–1882)	37	39	41	47	51	57	60	61	57	50	43
Fécamp (1853–1882)	39	40	43	48	52	58	61	62	58	52	45
Ste. Marie-du-Mont (1871–1900)	40	41	43	48	53	58	62	62	58	52	46
Guernsey (1851–1900)	43	43	43	47	51	56	59	59	58	53	48
Saint Malo (1871–1900)	41	42	45	50	54	59	62	62	59	53	46
Roscoff (1891–1900)	45	45	46	50	54	58	61	62	59	55	49
Brest (1866–1900)	44	44	46	51	55	60	64	64	61	54	48
Ernée (1881–1895)	38	40	43	49	54	60	63	62	58	50	43
Lorient (1862–1900)	43	44	46	51	56	62	65	65	61	54	48
Belle Île (1886–1900)	43	43	45	50	55	60	63	64	61	55	49
Nantes (1856–1900)	40	42	45	51	56	62	66	65	60	53	45
Angers (1851–1900)	39	41	45	51	57	63	66	66	60	52	45
Châteaudun (1891–1900)	36	38	42	50	56	62	66	65	59	50	42
Auxerre (1886–1900)	36	39	43	51	56	64	67	66	60	51	43
Chaumont (1881–1900)	33	36	41	49	55	62	65	64	58	49	41
Langres (1891–1900)	32	35	39	48	54	61	64	63	57	48	39
Besançon (1891–1900)	33	37	42	50	56	63	66	65	60	50	41
Moulins (1881–1890)	36	38	43	51	57	63	67	66	60	51	42
Cluny (1881–1890)	35	38	43	51	56	63	67	66	60	51	43
Annecy (1876–1900)	31	35	41	50	57	64	67	66	69	50	40
Lyon (1851–1900)	35	39	44	52	58	64	68	67	61	52	42
Puy-de-Dôme (1881–1900)	28	29	30	35	41	48	52	52	48	40	34
Menton (1877–1886)	45	46	49	55	61	68	73	73	69	61	52
Nice (1884–1900)	44	45	48	53	59	66	72	71	66	58	50
Marseille (1851–1900)	43	45	49	55	61	68	72	71	65	58	50
Avignon (1872–1884)	39	44	49	56	63	70	75	73	66	57	47
Montpellier (1851–1900)	41	44	48	54	61	68	73	72	65	57	48
Perpignan (1851–1900)	44	46	50	56	61	68	73	72	66	58	51
Toulouse (1851–1900)	40	42	46	52	58	65	73	72	65	57	48
Agen (1881–1900)	40	42	46	53	58	65	69	69	64	55	46
Bagnères (1891–1900)	38	42	44	49	54	60	64	64	60	51	44
Biarritz (1886–1900)	46	48	50	54	59	64	69	69	65	59	51
Bordeaux (1851–1900)	41	43	47	53	58	64	63	68	64	55	47
Belgium:											
Ostend (?)	36	38	42	47	53	59	63	63	60	51	44
Brussells (1851–1900)	34	36	40	47	53	60	63	62	58	50	41
Namur (1833–1862)	a35	a36	a40	a48	a56	a64	a66	a65	a57	a50	a40
Liége (1833–1862)	a25	a37	a41	a49	a57	a64	a67	a66	a59	a52	a41

a These averages are for 9 a. m. only.

AUTHORITIES:
For French stations: *Bigourdan*—Climat de la France. Paris, 1916.
For Belgian stations: Ostend from *Blanchard*—La Flandre. Paris, 1906.
Brussels from *Hann*—Handbuch der Klimatologie, 3
v. 3. Stuttgart, 1911. p. 192.
Namur and Liége from *Quetelet*—Météorologie de la Bel
Bruxelles, 1867.

TABLE 2.—*Average daily maximum and minimum temperature selected stations in France, Belgium, and the United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.
Fécamp, France (26 years):[1]	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Maximum	43	46	49	55	60	66	69	69	66	58
Minimum	34	37	38	42	46	51	55	55	52	47
Sèvres, France, (near Paris, 10 years):[2]										
Maximum	40	44	50	61	66	73	77	75	70	58
Minimum	32	32	35	41	45	52	55	55	51	43
Marseille, France (49 years):[2]										
Maximum	52	55	59	65	71	78	83	82	77	68
Minimum	36	38	41	46	51	57	61	60	56	50
Brussels, Belgium (12 years):[3]										
Maximum	41	45	48	60	65	72	74	72	67	58
Minimum	33	36	37	42	48	55	58	58	53	46
New York, N. Y.:										
Maximum	37	38	45	57	68	77	82	80	74	63
Minimum	24	24	31	41	52	61	67	66	60	49
Atlanta, Ga.:										
Maximum	50	53	62	70	79	85	87	85	81	71
Minimum	35	37	44	51	60	67	70	69	64	53
Chicago, Ill.:										
Maximum	37	33	42	54	64	74	80	78	72	60
Minimum	17	18	28	39	49	59	65	65	58	46
New Orleans, La.:										
Maximum	62	64	71	76	83	88	89	89	86	78
Minimum	47	49	56	61	68	74	76	75	72	63
Denver, Colo.:										
Maximum	42	44	52	60	69	80	86	85	77	65
Minimum	17	20	27	35	44	52	58	57	48	37
San Francisco, Cal.:										
Maximum	55	58	60	62	63	65	65	65	68	67
Minimum	45	47	48	49	50	52	52	53	54	54

[1] From Annales du Bureau Central Météorologique de France, 1885.

[2] From Annales du Bureau Central Météorologique de France.

[3] From *Académie Royal de Belgique*, Observations des Phénoménes Périodiques, 1870.

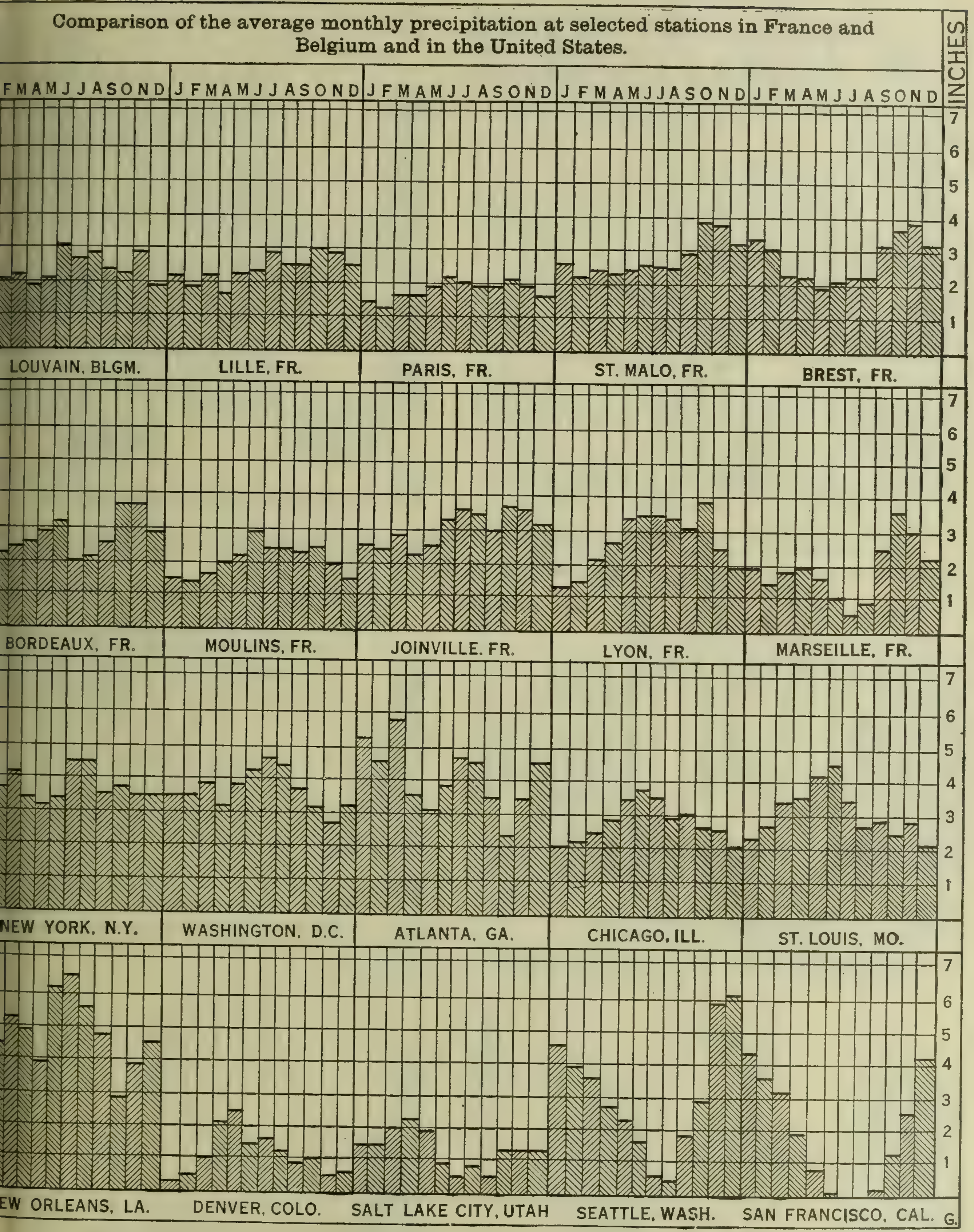

FIG. 7.—Synoptic chart of annual precipitation marches at selected stations in France, Belgium, and the United States.

TABLE 3.—*Highest and lowest temperatures ever recorded at selected stations in France.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Dunkirk *(1881–1900):*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*	° *F.*
Highest	56	65	71	75	87	88	89	97	91	77	70	59	97
Lowest	− 1	10	21	32	35	42	45	49	43	30	16	8	− 1
Lille *(1851–1900):*													
Highest	61	63	72	81	90	96	95	95	91	80	66	63	96
Lowest	0	5	18	27	32	37	39	45	37	22	16	− 2	− 2
Arras *(1881–1900):*													
Highest	56	64	72	79	91	95	99	96	92	80	68	60	99
Lowest	3	− 4	10	26	28	35	41	36	30	26	6	− 2	− 4
Paris *(1851–1900):*													
Highest	60	67	75	83	89	95	101	97	97	82	70	62	101
Lowest	7	7	16	26	32	38	43	43	35	26	7	−11	−11
Guernsey *(1851–1900):*													
Highest	57	59	66	76	77	81	85	87	83	73	66	60	87
Lowest	17	22	27	30	36	41	48	47	40	33	26	24	17
Nantes *(1881–1900):*													
Highest	64	64	71	83	86	94	102	99	98	83	71	62	102
Lowest	12	5	20	27	30	36	42	39	32	22	18	10	5
Chaumont *(1876–1900):*													
Highest	61	66	79	83	92	96	104	104	98	80	76	60	104
Lowest	−16	1	2	20	28	34	40	38	29	18	6	− 4	−16
Lyon *(1851–1900):*													
Highest	66	70	79	83	93	95	101	97	95	82	70	64	101
Lowest	−13	10	4	25	29	36	42	43	32	20	14	− 8	−13
Montpellier *(1851-1900):*													
Highest	69	77	82	86	94	102	106	102	98	86	76	70	106
Lowest	3	12	14	26	32	39	43	43	35	21	16	3	3
Bordeaux *(1881–1900):*													
Highest	67	72	78	84	91	96	103	107	98	86	75	67	107
Lowest	3	17	16	29	35	41	47	47	38	37	16	16	3
Brussels, Belgium, *(1851–1900):*													
Highest	56	65	70	78	91	94	95	95	88	77	68	60	95
Lowest	− 4	2	14	28	31	40	44	45	37	26	11	2	− 4

AUTHORITY: Annales du Bureau Central Météorologique de France, 1904.

TABLE 4.—*Average number of days with a minimum temperature of 32° F. or lower at selected stations in France and the United States.*

Stations.	October.	November.	December.	January.	February.	March.	April.	Annual.	Stations.	Annual.
FRANCE.	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	UNITED STATES.	*das*
Dunkirk (1881–1900)	0	3	8	10	8	5	0	34	Boston, Mass	105
Arras (1881–1900)	3	8	15	18	16	12	4	76	Washington, D. C	89
Paris (1874–1900)	0	5	11	11	10	6	0	43	Cincinnati, Ohio	83
Fécamp (1871–1900)	0	4	8	10	7	4	1	34	Chicago, Ill	111
St. Marie-du-Mont (1870–1900)	1	4	11	11	8	7	2	44	Kansas City, Mo	97
Roscoff (1891–1900)	0	0	4	4	3	1	0	12	Minneapolis, Minn	148
Nantes (1881–1900)	2	5	11	12	12	8	2	52	Bismarck, N. Dak	182
Angers (1872–1900)	1	4	11	12	9	5	1	43	Denver, Colo	145
Langres (1889–1900)	2	9	20	20	17	12	4	84	Salt Lake City, Utah	106
Besançon (1885–1900)	3	9	20	22	18	13	3	88	Helena, Mont	149
Lyon (1881–1900)	1	6	17	20	15	10	2	71	Seattle, Wash	22
Nice (1885–1900)	0	0	3	5	4	2	0	14	San Francisco, Cal	0
Marseille (1867–1900)	0	2	8	9	5	3	0	27	Los Angeles, Cal	1
Montpellier (1881–1900)	0	2	12	14	10	5	0	43	Santa Fe, N. Mex	140
Perpignan (1881–1900)	0	1	5	8	4	2	0	20	San Antonio, Tex	12
Toulouse (1881–1900)	0	3	11	12	8	5	0	39	New Orleans, La	5
Bordeaux (1881–1900)	1	4	9	11	8	5	0	38	Atlanta, Ga	39

AUTHORITIES:
Annales du Bureau Central Météorologique de France, 1904.
U. S. Weather Bureau.—Climatological data for the States, 1895-1914.

TABLE 5.—*Average number of days with temperature continuously below freezing at selected stations in France and the United States.*

Stations.	Dec.	Jan.	Feb.	Annual.	Stations.	Annual.
FRANCE.	*das.*	*das.*	*das.*	*das.*	UNITED STATES.	*das.*
Dunkirk (1881-1900)	2	4	2	8	Boston, Mass	29
Arras (1881-1900)	4	5	2	11	Washington, D. C	15
Paris (1874-1900)	4	4	3	11	St. Louis, Mo	80
Roscoff (1891-1900)	0	0	1	1	Chicago, Ill	47
Nantes (1881-1900)	2	2	1	5	Minneapolis, Minn	77
Angers (1872-1900)	3	3	1	7	Bismarck, N. Dak	89
Langres (1889-1900)	11	11	6	28	Denver, Colo	23
Besançon (1885–1900)	6	8	3	17	Salt Lake City, Utah	22
Nice (1885-1900)	0	0	0	0	Seattle, Wash	2
Marseille (1881–1900)	0	1	0	1	San Francisco, Cal	0
Montpellier (1881–1900)	0	0	0	0	Santa Fe, N. Mex	14
Perpignan (1881-1900)	0	1	0	1	San Antonio, Tex	1
Toulouse (1881-1900)	1	2	0	3	New Orleans, La	0
Bordeaux (1881-1900)	1	2	0	3	Atlanta, Ga	3

AUTHORITIES:
Annales du Bureau Central Météorologique de France, 1904.
U. S. Weather Bureau.—Climatological data for the States, 1895-1914.

TABLE 6.—*Average monthly and annual precipitation at selected in France and Belgium.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
France: [a]	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*
Dunkirk	2.16	1.54	1.69	1.65	1.89	2.13	2.44	2.87	2.80	3.19	3.23
Lille	2.13	1.81	2.20	1.65	2.24	2.28	2.76	2.52	2.52	3.03	2.84
Albert	2.00	1.65	1.89	1.54	2.13	2.24	2.68	2.20	2.24	2.48	2.36
Paris	1.42	1.10	1.46	1.54	1.85	2.09	1.97	1.85	1.89	2.13	1.89
Rouen	2.17	1.69	2.05	1.77	2.09	2.28	2.68	2.48	2.52	2.76	2.68
St. Malo	2.72	2.13	2.32	2.21	2.28	2.52	2.44	2.28	2.91	3.78	3.66
Brest	3.31	2.95	2.24	2.13	1.93	2.01	2.09	2.13	3.07	3.58	3.78
Joinville	2.64	2.52	2.84	2.28	2.52	3.31	3.58	3.35	3.03	3.71	3.62
Besançon	3.11	2.60	3.39	3.50	3.90	4.41	3.66	3.50	3.42	4.61	4.09
Moulins	1.42	1.34	1.69	2.01	2.21	2.95	2.44	2.40	2.32	2.44	1.89
Lyon	1.34	1.42	2.13	2.64	3.27	3.35	3.42	3.27	2.95	3.78	2.56
Clermont Ferrand (near Puy-de-Dôme)	1.10	1.14	1.34	1.65	2.36	2.80	2.24	1.97	2.24	2.24	1.50
Marseille	1.93	1.38	1.81	2.05	1.57	1.02	0.51	0.99	2.40	3.47	2.99
Montpellier	3.46	2.52	2.40	2.52	2.28	1.46	0.91	2.09	2.76	4.53	3.07
Toulouse	1.81	1.57	1.97	2.80	2.80	3.07	1.69	1.93	2.28	2.60	1.93
Perpignan	1.85	1.65	1.93	1.97	1.93	1.38	0.87	0.91	1.77	2.60	1.38
Bagnères	3.66	3.66	4.72	5.12	4.80	5.05	2.42	2.72	3.27	4.20	4.45
Bordeaux	2.80	2.28	2.52	2.64	2.91	3.19	2.01	2.16	2.60	3.70	3.66
Belgium:											
Ostend [b]	2.05	1.57	1.89	1.54	1.93	1.93	2.24	2.91	2.76	2.56	3.11
Ghent [c]	2.28	1.89	2.01	1.93	2.40	2.72	3.11	3.19	2.83	3.39	2.95
Louvain [d]	2.28	2.09	2.20	1.93	2.13	3.15	2.68	2.83	2.36	2.28	2.84
Namur [e]	1.73	1.42	1.61	1.77	2.05	2.60	2.95	2.84	2.13	2.32	1.97
Liége [f]	2.09	1.93	1.97	2.05	2.36	2.79	2.91	3.19	2.48	2.72	2.48
Brussels [g]	2.20	1.85	1.97	1.85	2.28	2.52	2.87	3.03	2.56	2.80	2.52

[a] Period 1861-1890.
[b] Period 1861-1882.
[c] Period 1838-1874, 1878-1890.
[d] Period 1836-1848.
[e] Period 1849-1863, 1877-1890.
[f] Period 1847-1890.
[g] Period 1833-1896.

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1895.
Belgium—*Lancaster*—La Pluie en Belgique. Bruxelles, 1894.

TABLE 7.—*Average number of days with precipitation, trace or m the 5-year period 1907–1911, at selected stations in France and United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
France:	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*
Nancy	13	16	14	13	14	14	14	12	11	13	17
Paris	16	17	17	17	17	16	14	11	12	16	16
Arras	19	19	19	17	15	15	18	14	16	19	22
Brest	17	16	21	17	13	14	11	11	10	22	20
Marseille	6	5	12	10	10	8	3	3	8	13	10
United States:											
New York, N. Y	18	15	16	15	16	13	10	14	11	11	14
Washington, D. C	17	14	16	16	16	16	14	15	11	11	12
Atlanta, Ga	13	13	11	14	14	14	19	15	10	8	11
Chicago, Ill	19	15	14	18	16	13	13	12	13	11	15
St. Louis, Mo	14	14	11	15	15	15	13	11	12	11	9
New Orleans, La	10	10	8	12	13	16	20	21	17	9	9
Denver, Colo	6	8	8	11	16	13	17	17	12	9	7
Salt Lake City, Utah	14	13	14	12	12	11	9	11	9	9	8
Seattle, Wash	22	20	18	16	15	12	7	6	11	15	21
San Francisco, Cal	21	15	14	6	7	4	3	1	4	7	7

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1907-1911.
United States—*Weather Bureau* Climatological data for the States, 1907-191

TABLE 8.—*Average number of days with precipitation from 0.25 inch, for the 5-year period 1907–1911, at selected stations in Fra the United States.*

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
France:	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*	*das.*
Nancy	2	3	2	1	2	5	4	2	2	4	4
Paris	1	1	1	2	3	3	2	2	2	5	3
Arras	3	2	1	3	4	4	3	1	2	5	4
Brest	3	3	3	2	2	1	2	1	2	6	5
Marseille	1	1	2	3	1	1	0	1	2	4	3
United States:											
New York, N. Y	4	4	3	4	3	4	2	2	3	3	3
Washington, D. C	4	4	3	3	4	4	3	3	2	3	3
Atlanta, Ga	3	5	3	4	4	4	3	4	3	3	2
Chicago, Ill	3	3	3	4	6	4	3	2	2	2	3
St. Louis, Mo	2	3	3	4	4	4	2	3	4	2	4
New Orleans, La	2	3	1	2	3	4	4	4	5	2	2
Denver, Colo	0	0	0	1	3	1	2	3	1	0	1
Salt Lake City, Utah	2	3	3	2	4	1	0	2	2	3	2
Seattle, Wash	6	5	2	2	3	1	0	0	2	3	6
San Francisco, Cal	8	5	5	0	0	0	0	0	0	1	2

AUTHORITIES: Same as for Table 7 above.

9.—*Total number of days with precipitation from 1.01 to 2.00 es, and with more than 2.00 inches, for the 5-year period 1907–1911, lected stations in France and in the United States.*

France.			United States.		
Stations.	1.01 to 2.00 inches.	Over 2.00 inches.	Stations.	1.01 to 2.00 inches.	Over 2.00 inches.
	Days.	*Days.*		*Days.*	*Days.*
	5	0	New York, N. Y.	36	9
	3	0	Washington, D. C.	39	6
	1	0	Atlanta, Ga.	42	8
	1	1	Chicago, Ill	30	3
e	9	4	St Louis, Mo	47	4
			New Orleans, La	63	29
			Denver, Colo	9	1
			Salt Lake City, Utah	3	0
			Seattle, Wash	16	0
			San Francisco, Cal	17	2

ITIES: Same as for Tables 7 and 8 above.

10.—*Average number of days with snowfall, at stations in France and United States.*

Stations.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Annual.
is—Parc St. Maur (1873–1903)[a]	1	3	4	3	3	1	15
tdidier (1784–1869)[b]	1	3	4	3	3	1	15
mp (1853–1882)[c]	0	2	2	2	2	0	8
ssels, Belgium (1833–1850)[d]	1	4	6	5	5	2	23
States:							
York	......	......	......	......	......	......	20
shington	......	......	......	......	......	......	14
nta, Ga	......	......	......	......	......	......	7
ago, Ill	......	......	......	......	......	......	30
sas City, Kans	......	......	......	......	......	......	19
ahoma, Okla	......	......	......	......	......	......	7
ver, Colo	......	......	......	......	......	......	33

[a] Annuaire de la Société Météorologique de France, 1905 (Paris).
[b] Annales du Bureau Central Météorologique de France, 1895.
[c] Annales du Bureau Central Météorologique de France, 1885.
[d] *Quetelet:* Climat de la Belgique, Bruxelles, 1857.
For the United States, see Table 8 above.

TABLE 11.—*Average cloudiness, in percentages of total sky, at selected station in France and Belgium and in the United States.*

The values given in this table for France and Belgium are averages for the various hours of observation and probably approximate the daily averages, the records in most cases covering periods of at least 10 years. Those for the United States represent the normal average daily cloudiness, *sunrise to sunset*, for a long period of years.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
France:	%	%	%	%	%	%	%	%	%	%	%	%	%
Dunkirk	72	71	63	59	57	58	55	63	60	71	79	72	65
Paris—Parc St. Maur	73	72	65	59	56	51	55	49	51	53	62	71	60
Rouen	65	64	58	56	51	52	49	52	58	61	67	67	58
Brest	71	71	70	64	56	67	64	60	61	66	75	64	66
Angers	68	61	57	56	52	53	54	53	56	61	69	69	59
Nantes	75	66	63	64	58	60	57	54	56	61	75	66	63
Besançon	60	64	58	55	51	53	48	48	49	59	65	65	55
Cluny	62	53	57	53	45	43	39	39	39	61	63	65	52
Nice	36	34	32	43	38	29	25	33	33	37	33	34	34
Marseille	47	47	41	46	46	36	23	30	42	44	42	49	41
Montpellier	39	38	36	40	36	31	26	28	35	39	40	41	36
Toulouse	68	57	57	59	57	55	44	45	50	52	61	66	56
Brussels, Belgium	77	78	71	62	63	67	63	65	58	65	75	79	69
United States:													
New York	58	54	56	54	53	51	51	51	48	48	54	56	53
Washington	58	54	55	50	50	48	46	48	45	45	51	54	50
Atlanta	57	55	51	49	47	50	54	54	47	38	45	53	50
Chicago	59	56	57	52	48	47	40	40	43	48	58	61	52
St. Louis	53	54	55	51	50	48	44	39	38	35	51	58	48
New Orleans	54	53	49	47	44	47	52	50	43	38	46	53	48
Denver	37	40	46	49	52	41	44	44	35	36	37	38	41
Salt Lake City	59	58	55	51	47	34	30	34	30	38	47	58	45
Seattle	77	71	64	60	65	58	42	42	56	67	75	79	63
San Francisco	53	49	48	41	40	35	41	43	33	35	42	50	43

AUTHORITIES:
France—Annales du Bureau Central Météorologique de France, 1884.
United States, as above.

TABLE 12.—*Prevailing wind directions and average relative humidities for Montpellier, Sèvres, and Brussels.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
	Prevailing winds.												
Sèvres (10 years)	SW	SW	W	SW	NE	W	W	W	W	SW	SW	SW	SW
Brussels (8 years)	SW	SW	SW	SW	SW	N	SW	SW	SW	SW	SW	SW	SW
	Average relative humidity.												
Sèvres (10 years)	%	%	%	%	%	%	%	%	%	%	%	%	%
7 a. m.	89	89	89	79	73	72	76	82	90	94	92	92	....
12 noon	78	69	60	51	51	51	54	55	58	68	76	80	....
9 p. m.	86	82	78	72	74	76	77	79	83	90	90	89	....
Montpellier (14 years):													
9 a. m.	82	76	70	67	62	58	56	57	66	71	80	80	....

AUTHORITIES: Annual reports of the French and Belgian meteorological services.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

ANNUAL, 1917

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MARCH 21, 1918.

MEAN TEMPERATURE AND PREVAILING WINDS FOR YEAR 1917.

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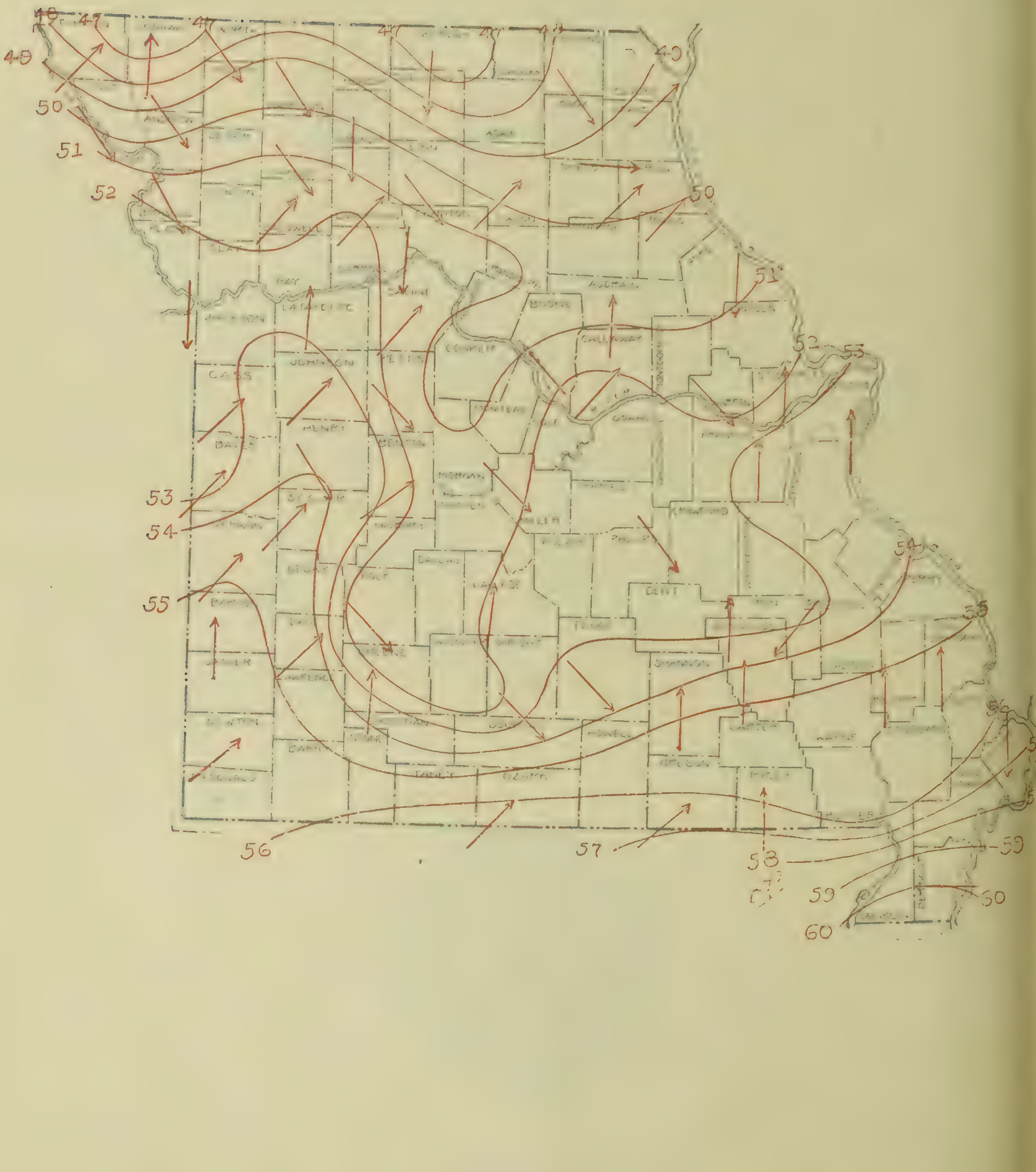


. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XI. COLUMBIA, MO., YEAR, 1917. No. 13.

GENERAL SUMMARY.

rmal weather prevailed in Missouri during the year
The year began mild and dry, and closed cold and
In each of the eight months, February, April, May,
ugust, September, October, and December, the mean
ture for the State as a whole was below normal, the de-
in May, October, and December being unusually
. All of the months except April and August, were
an normal. On the other hand, only October and De-
were generally unfavorable for outdoor occupations.

ies of destructive tornadoes occurred in southern and
stern portions of the Ozark Plateau and northern Low-
uring the last ten days of May, and on the 5th, and 12th
. in a few of the central and northern counties of the
The total loss of human life was 83, while 519 persons
re or less seriously injured. The estimated damage to
was put at about $1,530,000. (See Recapitulation
Tornadoes, 1917, page 108.)

g the first week in June continued excessive rains over
hern half of the State caused the northern tributaries of
souri River to overflow their banks, and later, from
me the 10th to 15th, the Missouri River, and the Mis-
River north of St. Louis, and their tributaries in north-
souri, flooded all adjacent lowlands, resulting in immense
and loss, including some of the finest wheat and corn
s well as hay, truck, and other property. July was no-
for unequal distirbution of its warmth and moisture;
sunshine and drought prevailed in counties on both
the Mississippi River from Jackson to Warren, while
inder of the State suffered but litle or none at all. Oc-
s the coldest of its name on record; fires for personal
were necessary during almost the entire month. Kill-
s on and after the 6th, ten days or more earlier than
age date, prematurely closed the growing season. The
t in early and December was characterized by much
l snow. Owing to the scarcity of water very little ice
sed.

te storms, floods, and an early killing frost nearly all
ids were larger than normal.

TEMPERATURE.

nnual mean for the State was 52.3°, or 2,2° below nor-
The highest annual mean was 60.0°, at Caruthersville,
lowest annual mean was 47.0°, at Unionville. The
temperature recorded during the year was 107, at Mex-
July 31st, and tne lowest temperature recorded during
r was —23°, at Jackson, and Neosho on December 9th.
ual range for the State was 130°.

PRECIPITATION.

rage precipitation for the State was 31.94 inches, or
ches less than normal. The greatest annual amount was
ches, at Koshkonong, and the least annual amount was
ches, at Warrenton. The greatest local monthly fall
51 inches, at Maryville in June, and the least local
y fall was 0.00 inches, at Kidder in February and at
the in November. The greatest fall in any twenty-four
tive hours was 5.20 inches, at Jackson on August 15th.
verage number of rainy days was 80. The snowfall av-
3.7 inches, the greatest amount, 24.5 inches, falling in
theast Lowlands, and the least, 8.1 inches, in the North-
ateau.

THE WEATHER BY MONTHS.

January.—Notwithstanding the fact that three cold waves swept over the Strte, the month as a rule, was bright, dry, and mild. Owing to scanty precipitation considerable plowing was done. The snowfall was light, about 50 per cent or the usual amount. There was very little sleet. Wheat was in fair condition, the absence of sleet being in its favor. Stock was in good winter condition. Out door work, as well as traffic in general, were about normal.

February.—There was much bright weather; and the precipitation was scanty. It was the driest February since 1870. The month, however, opened with a severe cold wave which spread over the entire State, and quite cold weather continued for several days. The monthly range of temperature, —22° on the 2d to 86° on the 26th, was rather more maaked than usual. On the other hond, there were only about six typical winter days, i. e., days on which the maximum temperature did not rise above 32°. The snowfall was light, and there was no sleet. Wheat made little or no top growth; the root growth, however, was quite satisfactory. High winds on a few dates caused some damage by blowing away the dirt from the roots. Peach buds were injured or killed by low temperatures on the 1st, and 2d. Thare was a scarcity of stock water.

March.—The month was more or less windy, but the weather was generally bright, moderate, and favorable for out door pursuits. Much needed moisture, falling in most cases as gentle to moderate rains, occurred at regular intervals. Wheat improved quite markedly over its poor winter condition; and pastures and meadows began to grow. Much plowing was done; and oats were about all sown, the soil being in exceptionally fine condition. Some peach orchards in the extreme Southeast were uninjured by low winter temperatures. The snowfall did not exceed 50 per cent of the normal amount.

April.—The month was somewhat colder and wetter than normal, but there were no damaging temperatures after the first decade, save at a few stations along the northern border. The precipitation was generous and well distributed. The monthly total, 5.97 inches, nearly equaled the combined totals of the preceding four months. Wheat, rye, and all grasses made good growth. Some corn was planted. In a few localities stock was turned on pastures that were not wholly ready for grazing purposes.

May.—Generally cool and rather wet weather prevailed. The mean temperature, 58.7°, was the lowest in 30 years. Minima on the 1st and 5th approximated the freezing value at a few stations in the western and northern portions ot the State; and the day temperatures reached 90° or higher on two or three days only. Despite the lack of warmth, frequent rains, and severe local storms farm work and crops made good progress. Destructive storms occurred in the southwestern part of the Ozarks and the northern part of the Lowlands. The loss of life and property was heavy.

June.—Severe local storms on the 5th, and the 12th, and damaging river floods (Missouri and northern tributaries), were the marked features of the month. The loss and .damag to property, and less in human and animal life by the tornadoes of May, and 5th and 13th of June were the greatest known in the history of the State. In other respects the month was generally favorable for out door occupations and crop growth; and markedly pleasant from the physiological side.

July.—Warmth, sunshine, and precipitation were unevenly distributed in this month. In most of the Missouri River counties, on both sides from Jackson to Warren, the weather was hot, dry, and sunshiny, being particularly noticeable during the last days. Over the northern half of the State neither heat nor drought was especially marked, while over the southern slope of the Ozarks the conditions were nearly idral. The month was favorable for the harvesting of grains and hay. There were no damaging storms.

August.—The weather was generally favorable for outdoor work and maturing crops. From a bodily standpoint it was a pleasant month. Fall plowing progressed with soil in fine condition. There was the usual number of thunderstorms, a few being accompanied by high wind and hail, but the damage was local and of little importance.

September.—The weather was pleasant from the viewpoint of bodily comfort, and favorable for maturing crops and for plowing and seeding. The rainfall was generally sufficient for needs. About 90 per cent of the corn crop was safe from killing frost; and about 70 per cent of the wheat land had been prepared, at the same time about 20 per cent had been seeded. Practically all farm interests were in satisfactory condition.

October.—The month was the coldest October of record; and one of the driest. There were many bright days, however, which, with the relatively dry atmosphere, made it a pleasant month despite the prevailing low temperatures. The growing season was prematurely closed by killing frost on the 6th, 8th, and 9th. A severe local storm occurred in Greene County during the evening of the 28th, but otherwise there were no damaging winds. Wheat sowing was nearly completed. About 25 to 30 per cent of bottom land corn was damaged by frost. Pastures were rather short; but stock looked well.

November.—The month was dry but pleasant, and favorable for out door work, being especially open and mild from about the 4th to the 22d. The weather was too dry for perfect germination of wheat and rye; but the early sown came up well. The frosted corn dried out well on the stalk and was usable for feeding purposes. The roads were in perfect condition. Much corn, however, was still too sappy for cribbing. Stock was in good condition.

December.—The month was characterized by temperatures and scanty precipitation. Temperatu quite steadily below the freezing point from the inclusive, and on the last five days of the month. The was generally unfavorable for out door occupations. A storm, accompanied by strong winds, prevailed on the 7 and 9th. Traffic on public roads, as well as railro much handicapped and interrupted for the time being. erage condition of wheat was poor in the northwest but fair in all other sections. Fortunately there was litt During the coldest weather snow covered the wheat, whi timely considering the poor condition of the late sown Stock was in good condition, but water was becoming s some localities.

Comparative Annual Data for the State

Year	Temperature Mean	Temperature Maximum	Temperature Minimum	Precipitation	Year	Temperature Mean	Temperature Maximum	Temperature Minimum
1888	52.9	111	−32	41.22	1903	53.6	[illegible]	[illegible]
1889	53.3	107	9	37.91	1904	53.2	[illegible]	[illegible]
1890	54.7	106	−19	35.71	1905	[illegible]	[illegible]	[illegible]
1891	53.9	108	11	[illegible]	1906	[illegible]	[illegible]	[illegible]
1892	53.4	101	11	42.76	1907	[illegible]	[illegible]	[illegible]
1893	52.7	107	24	38.19	1908	[illegible]	102	[illegible]
1894	55.1	111	25	33.18	1909	[illegible]	[illegible]	[illegible]
1895	52.9	106	26	[illegible]	1910	[illegible]	[illegible]	−24
1896	55.7	108	−10	44.63	1911	56.9	[illegible]	[illegible]
1897	55.0	108	16	38.82	1912	[illegible]	[illegible]	[illegible]
1898	54.3	104	−20	[illegible]	1913	[illegible]	[illegible]	−12
1899	54.0	108	−32	37.22	1914	56.1	109	[illegible]
1900	56.6	105	−16	38.34	1915	[illegible]	102	[illegible]
1901	55.5	116	−29	25.28	1916	55.2	[illegible]	[illegible]
1902	54.1	103	−17	44.36	1917	[illegible]	[illegible]	[illegible]
					Average 29 yrs	54.7	[illegible]	[illegible]

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR THE YEAR, 1917, AT THE UNIVERSITY O SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 102 and 103.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau stand described in Circular L. Horizontal distance of the anemomete pan, 2 inches. Height of cups of anemometer above pan inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 11 feet. Distance of rain gage fr 2.6 feet. The ground in the immediate vicinity of the pan slope north, average 5 per cent grade. The soil is covered by blue gr being part of the University campus. There are no bodies of wat nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The o tions in the table herewith, were taken by Philip G. McGinnis, observer, Weather Bureau. This is one of the "Class A" stat signed to furnish practical information relative to evaporation. complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Date.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
March	Evaporation	.103	.129	.092	*	*	*	.123	.053	.085	.130	*	.178	.138	.045	.046	.090	.169	.016	.127	.192	.062	.098	.225	.158	.186	.195	.133	.133	.200	.100
	Wind movement	84	73	70	59	67	106	102	111	60	58	*	193	92	105	56	92	159	111	71	83	43	37	72	79	66	60	117	74	86	[illegible]
April	Evaporation	.187	.063	.131	.163	.020	.121	.153	.030	.112	.111	.212	.152	.008	.112	.111	.018	.109	.129	.139	.127	.110	.188	.247	.175	.171	.208	.061	.076	[illegible]	.024
	Wind movement	[illegible]	96	41	66	101	80	120	105	81	43	56	66	81	50	44	58	48	43	51	82	109	44	56	62	70	86	64	104	73	58
May	Evaporation	[illegible]	.138	.041	[illegible]	.029	.108	.110	.087	.160	.185	.142	.131	.133	.201	.170	.186	.262	.235	.103	.263	.376	.185	.023	.156	.173	.047	.251	.057	.155	.117
	Wind movement	83	56	88	57	49	51	50	32	37	37	36	30	25	39	33	19	37	43	29	49	28	34	43	29	32	47	58	55	[illegible]	[illegible]
June	Evaporation	.064	.108	.102	.175	.212	.148	.291	.187	.219	.143	.221	.256	.161	.217	.286	.231	.166	.221	.270	.280	.159	.228	.329	.160	.241	.265	.239	.216	[illegible]	.218
	Wind movement	31	16	35	26	52	67	43	25	26	34	22	33	28	15	62	36	20	28	24	28	9	20	33	19	20	53	16	23	[illegible]	21
July	Evaporation	.261	.298	.291	.211	.202	.248	.237	.257	.151	.283	.262	.299	.254	.032	.078	.196	.215	.201	.231	.253	.273	.246	.198	.227	.221	.139	.248	.311	.222	.371
	Wind movement	35	17	31	23	17	30	24	23	20	28	23	17	34	28	11	19	36	16	15	25	21	21	19	27	29	28	31	29	32	[illegible]
August	Evaporation	[illegible]	[illegible]	.317	[illegible]	.266	[illegible]	.010	.110	.246	.256	.229	.173	.169	.167	.161	.014	.114	.180	.167	.162	.097	.131	.117	.281	.211	.185	.091	.115	.052	.150
	Wind movement	[illegible]	[illegible]	23	36	21	58	31	21	31	11	32	10	21	28	23	15	12	26	15	15	17	23	23	56	55	21	33	37	[illegible]	26
September	Evaporation	.142	.107	.173	.227	.112	.140	.195	.129	.069	.139	.113	.125	.104	.115	.113	.151	.149	.159	.119	.126	.051	.129	.108	.123	.107	.099	.119	.100	.095	.115
	Wind movement	22	20	20	26	30	22	23	14	23	31	37	24	26	25	20	17	32	20	16	30	51	28	22	18	24	21	32	25	29	28
October	Evaporation	.128	.120	.103	.123	.129	.130	.189	.121	.081	.086	.082	.061	.062	.131	.085	.144	.117	.107	.120	.079	.025	.063	.006	.000	.028	.014	.159	.032	.109	*
	Wind movement	43	44	29	22	13	56	28	16	28	13	38	78	15	29	36	11	66	62	96	14	21	29	64	49	15	73	32	14	90	105
November	Evaporation	*	*	.084	.092	.131	.101	.082	.061	.078	.083	.085	.020	.003	.017	.021	.031	.051	.052	.067	.033	.080	.131	.072	*	*	.104	.001	.002	.007	.018
	Wind movement	37	35	30	28	49	25	23	17	15	22	25	31	18	58	35	26	25	22	67	31	41	104	102	41	19	45	47	33	47	22

* [illegible] measurement.

Observations taken at 6.

Climatological data for Year, 1917.

ions	Counties		Temperature (Degrees Fahrenheit)						Precipitation (inches)							Number of days				
		Elevation, feet	Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	Prevailing direction of wind.
Plain.																				
	Chariton	650	29	51.4	101	July 30	−14	Feb. 2	38	26.91	6.09	April	T.	Nov.	13.4	82	189[a]	22[a]	153[a]	n.
l	Randolph	731	1	51.9	104	" 30	−15	" 2	1	23.90	7.19	"	0.10	Feb.	10.4	84	186	113	66	......
	Boone	784	28	51.7	102	" 30	−13	" 2	28	26.85	5.27	Aug.	0.10	Nov.	9.8	102	144	104	117	se.
	Howard	725	32	50.7	103	" 30	−16	" 2	35	29.27	5.88	April	0.05	"	10.2	84	......	......	......	......
	Callaway	818	27	52.0	102	" 30	−15	Dec. 10	27	25.87	5.05	May	0.19	"	10.1	108	......	......	......	sw.
	Scotland	700	......	......	......	......	......	......	25	30.77	10.00	June	0.07	Feb.	6.9	82	101	126	138	nw.
	Marion	534	26	50.6	102	July 30	−16	Feb. 2	26	26.47	6.38	April	0.08	Nov.	13.2	111	153	114	98	sw.
ty	Cole	557	30	52.0	101	" 30†	−11	" 2	35	26.89	6.78	May	0.31	"	20.0	93	248	44	73	s.
	Chariton	660	......	......	......	......	......	......	5	27.00	7.73	April	0.01	"	11.2	88	......	......	......	......
	Pike	469	24	51.0	101	July 31	−15	Dec. 11†	40	33.22	5.94	May	0.21	Feb.	13.6	100	215[a]	79[a]	70[a]	n.
	Macon	875	19	......	102	" 30†	......	......	20	......	6.56	"	......	......	......	......	......	......	......	sw.
	Audrain	797	29	51.0	107	" 31	−14	Feb. 2	40	27.48	5.20	"	T.	Nov.	15.8	64	212	75	75	s.
	Franklin	793	26	53.1	100	" 13†	−12	" 2	26	29.31	6.41	Aug.	0.17	Feb.	13.3	87	116	160	89	s
	Marion	652	16	49.2	102	" 30	−17	" 2	19	28.42	6.43	June	0.07	"	16.7	79	198	53	114	sw.
ne.	Linn	850	5	50.4	97	" 30†	−17	" 2	4	28.10	7.16	"	0.01	"	13.2	84	150	150	65	nw.
	St. Charles	456	30	53.2	100	" 31	−12	" 2	40	25.95	5.29	Aug.	0.44	Dec.	10.7	63	128	134	103	s.
)	St. Louis City	717	45	54.0	96	" 13	−10	" 2	47	25.00	4.64	April	0.35	Feb.	12.3	112	113	155	97	s.
)	.....do	578	6	53.2	96	" 13†	−11	" 2	6	25.30	5.07	"	0.59	"	16.0	124	146	117	102	nw.
	Lewis	650	20	49.7	105	" 30†	−17	" 2	25	29.37	6.78	"	0.05	Nov.	13.0	73	136	159	70	w.
	Putnam	1,072	25	47.0	103	" 30	−22	" 2	25	37.41	10.98	June	0.08	"	23.0	81	219	77	69	n.
	Warren	865	34	51.6	101	" 30†	−13	" 3	28	23.46	4.21	May	0.11	Feb.	14.0	93	130	142	93	nw.
wa	Lee, Ia.	574	46	49.3	100	" 30	−18	" 2	46	29.00	7.35	June	0.01	Nov.	11.1	95	153	137	75	sw.
ns and ext	remes	......	......	51.1	107	" 31	−22	" 2	......	28.05	10.98	"	T.	"	13.2	90	163	109	93	sw.
lands.																				
lle	Pemiscott	220	22	60.0	104	July 1†	− 9	Dec. 9	27	42.60	6.40	July	0.97	Sept.	23.5	76	227	54	84	e.
	Ripley	344	14	56.2	98	" 1	−16	" 9	14	44.57	10.74	April	0.11	"	15.0	89	216	52	97	s.
	Cape Girardeau	458	27	54.6	99	June 24†	−23	" 9	27	46.73	11.46	Aug.	0.76	Dec.	26.5	80	134	103	128	s.
	Bollinger	420	24	54.7	......	......	−12	" 10	27	......	......	......	......	......	27.5	......	162[1]	125[1]	66[1]	s.
r)	Bollinger	500	......	......	......	......	......	......	4	30.23	5.30	April	0.50	Feb.	......	51	......	......	......	......
I	Butler	339	14	54.4	96	July 1	− 1	Feb. 2	15	39.03	8.74	"	0.21	Sept.	21.2	87	190	65	110	......
	Alexander, Ill	359	46	56.1	94	June 26†	− 7	Dec. 9	46	40.43	6.96	"	1.40	"	33.5	102	123	132	110	n.
ns and ext	remes	......	......	56.0	104	July 1†	−23	" 9	......	40.60	11.46	Aug.	0.11	"	24.5	81	175	90	100	s.
eau.																				
	Shannon	1,078	24	54.4	95	July 7	−14	Dec. 9	25	44.67	9.93	April	0.63	Feb.	15.0	67	247[b]	48[b]	68[b]	s.
	Polk	1,071	22	51.4	93	June 30	−12	" 9	31	29.57	5.02	May	0.20	"	16.0	77	234	77	54	nw.
	Pulaski	1,126	6	......	97	Aug. 2	......	......	......	......	......	......	......	......	......	......	......	......	......	......
	McDonald	1,000	19	......	100	July 8	−21	Dec. 9	19	39.85	7.73	July	0.12	Jan.	14.2	69	......	......	......	......
	Miller	934	18	51.8	99	June 30†	−13	Feb. 2	6	29.26	6.52	May	0.05	Feb.	14.0	79	123	157	80	nw.
	Reynolds	1,150	4	55.5	101	July 1	−10	Dec. 9	4	41.51	8.44	April	0.30	"	16.5	69	224	79	62	s.
	Dent	1,250	14	52.7	97	June 27	−11	Feb. 2†	15	37.48	8.08	Aug.	0.27	"	17.6	83	197	93	75	s.
	Iron	1,000	13	52.4	100	July 31	−22	Dec. 9	13	38.34	8.54	April	0.12	"	11.1	76	199	105	61	s.
	Taney	735	32	56.2	102	" 1	− 4	Feb. 2	9	45.34	9.25	"	0.10	"	18.0	51	227	0	158	sw.
	Texas	1,280	25	53.9	96	" 1	−12	Dec. 9	26	30.65	6.58	"	0.15	"	18.1	69	205	67	93	nw.
	Iron	925	37	52.5	97	" 1	−13	" 9	40	41.82	7.69	"	0.25	"	15.0	100	96	172	97	ne.
g	Oregon	958	17	56.1	98	" 1	−10	" 9	17	48.31	10.82	"	1.28	Dec.	20.0	81	168[a]	86[a]	108[a]	sw.
	Laclede	1,265	29	52.4	97	June 30†	−13	" 10	29	30.25	7.06	Aug.	0.33	Feb.	12.5	93	254	41	70	s.
	Dade	1,078	12	54.6	97	July 7	−12	" 9	24	35.32	7.12	May	0.27	Oct.	11.5	66	210	57	98	sw.
Grove	Wright	1,490	17	52.0	95	" 13	−12	" 9	19	41.38	6.06	Aug.	0.48	Feb.	18.0	84	161	100	104	nw.
	Newton	1,011	32	54.9	97	" 8	−23	" 9	35	40.23	6.70	"	0.38	Oct.	......	83	242	51	72	sw.
	Phelps	1,139	18	52.8	98	June 26	−13	Feb. 3	37	30.76	5.78	April	0.12	Feb.	16.8	72	187	130	48	nw.
	Greene	1,350	30	53.5	94	" 30	−10	" 2	30	31.71	4.63	"	0.31	Oct	27.6	89	194	96	75	s.
ns and ext	remes	......	......	53.6	102	July 1	−23	Dec. 9	......	37.45	10.82	"	0.05	Feb.	16.4	77	198	85	82	s.
Plain.																				
	Bates	831	9	52.5	100	July 8	−12	Feb. 2	9	28.38	6.49	Aug.	T.	Nov.	15.0	63	157	83	125	sw.
ity	St. Clair	853	26	54.3	100	June 30	−10	" 2	26	......	......	......	0.11	Feb.	6.4	......	157[b]	125[b]	67[b]	sw.
	Henry	765	10	53.9	102	July 30	−10	" 2	32	26.91	6.09	Aug.	0.12	"	8.0	61	182	103	80	nw.
lle	Cass	912	40	51.3	104	" 30	−12	Dec. 10	46	26.82	6.23	May	0.07	"	10.5	83	135	33	197	sw.
	Barton	980	31	55.0	100	June 30†	−12	" 9	37	30.34	6.28	"	0.14	"	7.6	70	189	51	125	s.
	Pettis	863	28	51.6	101	July 30	−17	" 10	32	27.44	5.40	April	T.	Nov.	11.0	62	179	108	78	nw.
	Saline	779	27	51.8	103	" 30†	−13	Feb. 2†	27	28.14	6.92	"	0.08	"	12.0	74	167[b]	98[b]	92[b]	sw.
	Vernon	860	23	54.8	98	" 13†	− 9	" 2†	24	28.52	6.65	May	0.04	Feb.	16.0	66	230	70	65	sw.
rg	Johnson	883	35	53.6	104	" 31	−12	" 2	39	28.99	6.00	April	0.04	"	14.3	77	177	113	75	sw.
	Benton	715	14	53.8	102	June 30†	−19	Dec. 10	14	33.61	6.38	Aug.	0.58	"	18.0	88	162	152	51	sw.
ans and ext	remes	......	......	53.3	104	July 30	−19	" 10	......	28.79	6.92	April	T.	Nov.	11.9	71	174	95	96	sw.
Plateau.																				
	Livingston	730	31	53.2	102	July 30	−15	Feb. 2	31	28.36	7.20	April	T.	Feb.	7.7	57	229	75	61	sw.
	Harrison	916	26	49.1	104	" 30	−19	" 2	28	32.33	12.08	June	T.	Nov.	9.6	73	134	134	97	nw.
	Livingston	768	......	......	102	" 31	......	......		30.57	7.70	"	0	"	......	......	......	......	......	......
	Nodaway	982	29	49.8	104	" 30	−21	Feb. 2	33	29.22	12.22	"	T.	Feb.	7.0	65	157	149	59	nw.
	Daviess	803	......	......	......	......	......	......	16	33.88	9.00	"	0.03	"	7.4	92	197	84	84	nw.
	Worth	1,134	15	49.4	105	July 30	−20	Feb. 2	26	30.50	12.62	"	T.	"	5.5	51	232	34	98	nw.
	Jackson	963	29	52.7	102	June 30	−12	" 2	29	29.31	6.87	April	0.06	Nov.	15.0	90	195	89	81	n.
	Caldwell	1,020	25	51.5	105	July 31	−17	" 2	27	27.39	5.68	Aug.	0	Feb.	11.7	81	202	57	88	sw.
	Lafayette	688	32	52.2	102	" 31	−13	" 2	36	25.76	7.43	April	0.04	"	12.9	73	210	2	153	s.
	Clay	864	28	......	104	" 30	......	......	29	30.98	7.24	"	0.05	"	13.1	62	......	......	......	......
	Nodaway	1,036	24	47.5	105	" 30	−21	Feb. 2†	27	32.03	13.54	June	0.10	"	10.0	83	218	53	91	s.
	Holt	1,048	62	49.1	102	" 30	−18	" 2	62	27.61	9.07	"	T.	Nov.	3.7	65	171	112	82	nw.
	Buchanan	967	10	51.3	103	" 30	−16	" 2	47	24.80	6.21	"	0.02	Feb.	5.8	88	160	127	78	nw
	Atchison	976	15	49.7	103	" 31	−19	" 2	25	22.58	7.47	"	T.	"	1.0	64	239[a]	43[a]	82[a]	sw.
	Grundy	822	22	50.0	99	" 30†	−17	" 2	23	34.44	8.39	"	T.	Nov.	3.0	69	188	97	80	n.
ans and ext	remes	......	......	50.5	105	" 30	−21	" 2	......	29.32	13.54¶	"	0*	Feb.	8.1	72	195	82	88	nw.
ns and extr	emes	......	......	52.3	107‡	July 31	−23§	Dec. 9	......	31.94	13.54	"	0	"	13.7	80	182	93	90	sw.

on other dates. ‡ At Mexico July 31st. § At Jackson and Neosho Dec. 9. ¶ At Maryville. * At Kidder, also at Chillicothe in Nov. a, b, , indi
mber of days missing from records, a, 1; b, 2; c, 3; etc.

Monthly and Annual Precipitation for the Year 1917, and Departures.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain.																								
Boonville	0.59	−1.41	0.16	−2.47	3.92	+0.88	5.51	+1.59	5.84	+0.65	2.93	−2.76	1.13	−3.03	5.50	+2.65	4.11	[illegible]	1.24	−1.19	[illegible]	−2.25	[illegible]	−1.77
Brunswick	0.71	−0.95	0.05	−2.00	2.78	+0.36	6.09	+2.81	5.25	+0.39	2.15	−3.28	2.67	−2.06	2.89	−1.03	2.47	[illegible]	1.35	−1.45	T	−1.92	[illegible]	[illegible]
Clifton Hill	0.57	−1.44	0.10	−1.86	3.16	+0.54	7.19	+3.85	2.93	−2.37	1.34	−4.22	1.84	−2.42	2.04	−0.80	2.90	−0.96	1.00	−0.85	0.13	−1.57	[illegible]	[illegible]
Columbia	1.05	−1.18	0.25	−1.88	3.52	+0.49	4.64	+0.94	4.89	+0.03	2.66	−1.72	0.93	−2.72	5.27	+2.27	2.58	−0.47	0.72	−1.70	0.10	−2.21	0.13	−1.77
Fayette	0.54	−1.43	0.16	−1.96	1.02	+1.36	5.88	+2.52	4.32	0.29	3.18	−1.48	1.24	−2.63	4.07	+1.01	4.15	−0.64	1.12	−1.55	0.15	−1.96	[illegible]	[illegible]
Fulton	1.67	−0.80	0.29	−1.86	3.46	+0.48	4.27	+0.14	5.05	−0.47	1.57	−3.27	2.06	−2.28	4.27	+0.97	1.29	−2.80	1.25	−1.25	0.19	−2.21	[illegible]	−1.68
Glencoe	1.67	......	0.35	......	1.47	......	5.13	......	1.41	......	0.34	......	3.62	......	5.66	......	2.11	......	1.00	......	0.74	......	1.50	......
Gorin	0.45	−1.18	0.07	−1.59	1.80	−0.60	5.64	+1.79	4.43	+0.02	10.00	+6.30	2.37	−1.93	1.44	−1.43	2.60	−1.90	1.51	−0.88	0.21	−1.76	0.25	−1.64
Hannibal	0.88	−1.32	0.10	−1.50	3.95	+1.19	6.38	+3.13	3.83	−1.17	3.75	+0.23	1.71	−2.04	1.87	−1.51	2.43	−1.13	0.94	−0.70	0.08	−1.87	0.55	[illegible]
Hermann	1.20	−1.03	0.65	−1.78	2.28	−0.72	4.95	+1.12	4.15	−0.15	2.27	−2.52	2.31	−1.63	3.17	......	1.82	−2.20	0.85	−1.84	0.38	−2.11	0.50	−1.31
Jefferson City	1.76	−0.33	0.37	−1.88	2.26	+0.23	4.56	+1.20	6.78	+2.14	0.99	−3.28	2.58	−1.06	1.16	−1.27	1.98	−1.20	0.56	−1.81	0.31	−1.96	0.58	−1.57
Keytesville	0.72	......	0.08	......	3.31	......	7.73	......	3.77	......	1.34	......	2.49	......	3.11	......	3.00	......	0.75	......	0.61	......	0.60	......
Kirksville	......	......	......	......	......	......	6.00	+2.54	3.95	−1.31	5.71	+1.32	1.80	−2.78	1.46	−1.79	3.59	−0.81	1.42	−1.44	0.02	−1.73	0.28	−1.44
Louisiana	2.13	+0.23	0.21	−2.30	5.72	+3.10	4.28	+1.23	5.94	+1.57	3.01	−1.00	2.89	−0.49	1.01	−0.73	2.55	−1.23	1.59	−0.93	0.23	−1.93	0.60	−1.06
Macon	0.54	−1.12	0.06	−2.19	4.25	+1.76	6.05	+3.17	6.56	+2.09	3.50	−1.15	2.00	−2.02	1.34	−1.44	2.59	−1.58	1.00	−1.78	......	......	......	......
Mexico	1.25	−0.82	0.36	−2.14	4.05	+1.35	5.11	+1.59	5.20	+0.52	1.80	−3.18	1.12	−2.90	4.69	+1.68	2.21	−2.24	1.08	−1.24	T.	−2.40	0.58	−1.54
Oakfield	1.80	−0.60	0.17	−2.37	2.92	−0.78	4.84	+1.59	3.36	−1.70	1.00	−3.57	3.68	−0.89	6.41	+2.79	2.69	−1.21	0.97	−1.89	0.91	−1.70	0.56	−1.46
Pacific	1.76	......	0.21	......	1.75	......	6.05	......	3.45	......	0.52	......	1.95	......	5.66	......	1.49	......	0.97	......	1.15	......	0.74	......
Palmyra	0.91	−1.39	0.07	−2.31	3.05	+0.05	5.82	+2.55	4.12	0.58	6.43	+1.80	2.29	−1.37	0.98	−2.37	3.22	−0.55	1.03	−1.38	0.08	−2.26	0.12	−1.56
St. Catherine	0.48	......	0.01	......	2.02	......	5.97	......	3.26	......	7.16	......	2.06	......	2.87	......	2.82	......	1.13	......	[illegible]	......	0.27	......
St. Charles	1.26	−1.09	0.98	−1.94	1.83	−1.36	3.70	+0.16	4.34	+0.08	2.16	−2.00	1.91	−1.67	5.29	+2.07	1.98	−1.15	1.56	−0.98	0.50	−2.15	0.44	−1.51
St. Louis (1)	1.72	−0.55	0.35	−2.40	1.80	−1.63	4.64	+1.12	3.78	−0.46	0.62	−3.85	3.17	−0.26	1.99	−0.67	3.50	−0.59	1.87	−0.54	0.78	−2.10	0.78	−1.45
St. Louis (2)	1.95	......	0.59	......	1.96	......	5.07	......	3.95	......	0.69	......	2.28	......	2.41	......	2.90	......	1.51	......	0.89	......	1.10	......
Shelbina	0.60	−1.30	......	......	3.01	+0.39	7.47	+4.28	3.19	−1.97	......	......	......	......	1.34	−1.30	1.33	+0.64	0.97	−2.05	0.00	−2.11	......	......
Steffenville	0.58	−1.65	0.42	−1.68	4.33	+1.46	6.78	+3.36	3.73	−1.31	5.90	+1.91	1.14	−3.60	1.00	−2.47	3.70	−0.84	1.05	−1.00	0.05	−1.83	0.39	−1.32
Union	1.57	......	0.27	......	1.67	......	6.24	......	4.19	......	0.93	......	2.85	......	6.52	......	1.45	......	1.26	......	1.06	......	0.60	......
Unionville	0.85	−1.17	0.16	−1.90	2.12	−0.13	6.43	+2.89	5.65	−0.22	10.98	+6.56	1.94	−2.35	3.01	−0.78	3.85	−0.94	1.98	−0.42	0.08	−1.59	0.50	−1.35
Valley Park	2.06	......	0.50	......	2.11	......	5.75	......	4.72	......	0.57	......	2.61	......	3.95	......	1.76	......	1.19	......	0.99	......	0.58	......
Warrenton	1.44	−1.02	0.11	−2.40	3.59	+0.30	4.55	+0.33	4.21	−0.42	0.98	−3.37	1.56	−2.37	3.41	−0.42	1.38	−2.58	1.00	−1.73	0.27	−2.37	0.86	−1.31
Keokuk, Iowa	0.56	−1.13	0.13	−1.49	3.46	+1.09	3.36	+0.02	2.53	−1.72	7.35	+3.00	2.56	−1.38	1.37	−1.87	5.29	+1.32	1.93	−0.56	0.01	−1.84	0.36	−1.51
Southeast Lowlands.																								
Cardwell	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1.19	......	......	......	......	......	......	......	......	......
Caruthersville	5.54	+1.04	2.76	−1.32	4.63	+0.24	5.05	+0.96	2.32	−1.62	5.07	+1.40	6.40	+2.84	5.31	+1.92	0.97	−2.20	1.53	−1.29	1.48	−2.54	1.60	−2.70
Doniphan	3.10	−0.87	2.20	−1.60	2.60	−1.32	10.74	+5.36	3.16	−0.61	5.20	+0.98	4.86	−1.14	6.66	+2.96	0.11	−3.66	1.56	[illegible]	2.59	[illegible]	[illegible]	−0.94
Jackson	3.02	−0.61	1.21	−2.11	2.13	−2.69	8.71	+4.17	3.63	−0.65	4.66	+0.42	5.36	+1.59	11.46	+8.30	1.23	[illegible]	1.75	−1.20	2.83	−0.08	0.75	−2.52
Marble Hill	3.25	+0.01	1.62	−2.05	1.60	−3.17	7.65	+3.01	......	......	5.15	+0.83	5.71	+0.81	6.33	+3.58	1.1	−2.54	0.90	−1.49	3.08	−0.13	0.42	−2.71
New Madrid	4.96	−0.28	2.15	−2.06	1.74	−0.98	7.25	+2.88	3.91	−0.41	5.49	+1.39	7.22	+2.87	5.56	+2.07	0.81	−2.52	1.50	−1.84	1.20	−2.29	[illegible]	−1.82
Patton (near)	0.64	......	0.30	......	3.60	......	5.30	......	2.06	......	4.60	......	3.15	......	4.48	......	0.40	......	2.50	......	2.50	......	0.70	......
Poplar Bluff	3.06	−0.50	1.59	−2.07	2.53	−2.84	8.74	+4.31	2.43	−2.56	4.59	−0.73	5.62	+1.87	5.51	+2.37	0.21	−2.96	1.09	−1.74	2.55	−0.92	1.07	−2.65
Sikeston	4.46	−0.01	2.00	−1.63	3.27	−2.15	7.77	+3.54	2.12	−2.64	4.05	−0.33	3.34	−0.99	4.40	+1.63	0.05	−2.93	......	......	......	......	......	......
Cairo, Ill.	4.32	+0.50	1.54	−1.79	3.60	−0.42	6.96	+3.39	1.72	−2.11	3.15	−1.16	4.74	+1.29	6.36	+3.43	1.40	−1.07	1.42	−1.21	2.97	−1.11	2.31	−1.02
Ozark Plateau.																								
Arlington	1.80	−0.22	T.	−2.91	2.33	−0.61	5.71	+1.99	4.31	−0.01	2.48	−1.06	4.43	+1.07	6.38	+2.57	3.01	−0.66	0.88	−1.34	1.25	−1.48	0.50	−1.06
Birchtree	3.34	+0.62	0.63	−2.21	1.27	−3.36	9.92	+5.23	4.09	−0.04	6.74	+2.23	3.41	−1.07	8.15	+3.69	1.48	−2.14	1.11	−1.35	3.62	+0.81	0.87	−1.73
Bolivar	1.34	−0.66	0.20	−2.27	2.25	−0.83	3.87	−0.29	5.02	−0.29	1.36	−3.95	4.60	+0.76	4.35	+0.76	3.97	−0.24	[illegible]	−2.78	[illegible]	−1.61	[illegible]	−1.12
Cassville	2.07	−0.25	0.52	−1.51	6.22	+2.08	3.63	−0.26	5.39	−0.36	3.49	+0.12	6.04	+1.28	4.61	+0.71	......	......	......	......	......	......	......	......
Crocker	......	......	T.	−1.85	......	......	......	......	4.79	+0.78	0.09	−3.19	2.70	−1.36	7.55	+4.21	5.00	+1.00	0.04	−2.83	0.97	−0.99	......	......
Dean	0.12	−1.65	0.82	−1.32	2.42	−1.10	4.34	0.14	5.16	−1.14	2.19	−3.53	7.73	+3.45	5.55	+1.51	3.55	+0.13	[illegible]	−1.57	[illegible]	+3.00	1.15	−0.98
Eldon	1.01	−1.07	0.05	−2.56	2.19	−1.02	5.78	+1.27	6.52	+1.77	1.64	−2.94	2.36	−1.79	4.50	+0.44	3.83	+0.08	[illegible]	−2.32	0.40	−1.95	0.79	−1.69
Fruit City	3.65	−0.83	0.30	−3.45	3.58	+0.63	8.44	+5.05	4.55	+0.15	4.10	−0.74	3.71	−0.22	5.33	+1.48	1.28	−2.17	2.10	−0.66	3.22	−0.88	1.25	−1.71
Gano	2.57	−0.35	0.27	−2.54	2.89	−0.91	6.90	+2.07	3.60	−0.71	2.05	−2.54	4.36	+0.11	8.08	+3.61	2.25	−2.41	1.79	−1.77	1.14	−0.52	1.28	−0.69
Goodland	3.35	+0.33	0.12	−2.70	2.28	−2.24	8.54	+3.52	5.10	+0.76	2.58	−1.71	3.18	+1.28	7.20	+3.56	1.21	−2.65	1.24	−1.74	2.62	−0.20	0.92	−1.53
Hollister	1.50	−0.87	0.10	−3.18	1.40	−2.61	9.25	+5.56	5.84	+0.89	3.85	−0.30	6.60	+2.07	3.85	0.40	3.00	−0.62	0.80	−2.14	7.75	+4.73	1.40	−1.41
Houston	1.58	−0.60	0.15	−2.33	1.86	−2.80	6.58	+1.82	2.25	−2.20	3.18	−1.83	3.35	−1.41	3.27	−0.27	3.24	−0.75	0.80	−1.58	2.50	−0.01	1.75	−0.57
Ironton	4.10	+1.08	0.25	−3.18	2.74	−1.39	7.69	+3.19	3.81	−0.93	2.65	−2.17	6.49	+2.03	5.23	+1.64	2.86	−0.86	2.05	−0.81	2.70	−1.01	1.25	−1.73
Koshkonong	3.11	−0.09	1.56	−1.61	1.72	−2.38	10.82	+5.78	4.72	−0.29	6.94	+2.81	6.23	+1.91	7.02	+3.29	1.64	−1.99	1.64	−1.07	1.63	−1.36	1.28	−1.78
Lebanon	1.58	−0.83	0.33	−2.41	2.29	−1.34	3.49	−0.67	5.83	+0.32	1.70	−3.42	2.69	−1.65	7.06	+3.79	2.74	−1.39	0.48	−2.48	1.36	−1.20	1.00	−1.53
Lockwood	1.02	−0.60	0.36	−1.93	2.71	+0.35	3.86	+0.47	7.12	+2.35	2.66	−2.07	5.34	−0.17	5.45	+1.16	4.07	0.00	0.27	−2.70	2.02	−0.05	0.44	−1.59
Mountain Grove	4.35	+1.81	0.48	−2.20	2.09	−2.63	5.12	+0.16	3.43	−1.22	4.13	−0.14	4.87	+0.61	6.06	+1.57	4.50	+0.29	1.78	−1.05	3.74	+1.60	0.83	−1.42
Mt. Vernon	......	......	0.50	−2.33	1.13	−2.55	5.30	+1.72	......	......	......	......	......	......	......	......	5.23	+1.60	......	......	......	......	2.84	−0.29
Neosho	0.53	−1.81	0.78	−1.83	1.84	−1.70	5.43	+1.28	5.64	−0.42	5.55	+0.12	6.21	+1.88	6.79	+2.57	2.09	−2.11	0.38	−2.79	4.24	+1.36	[illegible]	−1.87
Rolla	1.81	−0.53	0.12	−2.32	2.00	−1.52	5.78	+1.41	3.70	−1.40	1.42	−2.87	4.10	−0.04	5.68	+1.96	2.82	−0.98	1.16	−1.28	1.22	−1.32	0.95	−1.44
Springfield	1.46	−1.20	0.47	−1.80	2.31	−1.76	4.63	+0.77	3.90	−1.65	2.69	−2.50	4.15	−0.64	4.26	−0.03	3.74	−0.02	0.31	−2.40	2.61	−0.03	1.18	−1.49
Steelville	1.75	−0.30	0.05	−2.48	2.69	+0.70	6.66	+2.46	1.10	−3.12	......	......	3.83	+0.57	6.02	+2.57	1.86	−1.36	......	......	1.18	−1.56	0.50	−1.34
Southwest Plain.																								
Amoret	1.01	+0.01	0.07	−2.87	3.02	+0.52	3.47	−0.97	4.91	−0.53	0.51	−3.85	3.38	−1.38	6.49	+2.95	4.41	+0.43	0.61	−1.77	T.	−1.59	0.50	−1.24
Appleton City	0.33	−1.96	0.11	−2.05	1.97	−1.17	4.11	−0.17	6.30	+0.63	0.66	−4.68	3.64	−1.34	......	......	3.35	−0.17	0.77	−1.60	0.27	−1.91	0.22	−1.56
Clinton	0.59	−1.45	0.12	−2.19	3.42	+0.65	3.81	−0.27	4.13	−1.36	1.66	−3.22	1.95	−2.34	6.09	+2.79	3.22	−0.45	1.22	−1.47	0.15	−1.78	0.55	−1.30
Harrisonville	0.46	−1.09	0.07	−2.11	3.19	+0.66	4.80	+1.33	6.23	+1.47	0.67	−3.94	0.67	−3.32	5.66	+1.59	3.25	−1.13	1.36	−1.19	0.16	−1.81	0.30	−1.56
Lamar	0.82	−0.91	0.11	−2.33	1.53	−1.36	4.63	+0.53	6.28	+0.92	2.28	−2.60	6.19	+1.70	1.49	−2.80	4.16	−0.15	0.29	−2.61	1.23	−0.95	1.30	−0.67
Lamonte	0.16	−1.28	0.10	−1.98	3.25	+0.81	5.40	+1.66	5.30	+0.37	1.53	−3.19	1.17	−3.07	4.94	+1.58	3.39	−1.08	1.40	−0.83	T.	−1.93	0.50	−1.30
Marshall	0.20	−1.61	0.12	−1.88	4.31	+1.75	6.92	+3.37	4.06	−0.94	1.46	−3.00	0.61	−3.81	4.26	+0.70	4.46	−0.55	1.16	−1.44	0.08	−2.06	0.50	−1.27
Nevada	1.27	−0.71	0.04	−2.16	2.60	−0.34	3.72	0.00	6.05	+0.33	1.02	−4.26	4.75	+0.44	4.47	+0.99	2.80	−1.43	0.64	−2.33	0.46	−1.43	0.70	−1.23
Osceola	......	......	......	......	......	......	4.01	......	5.96	+0.04	......	......	3.30	......	5.27	+2.46	3.92	+0.04	0.58	−1.61	0.35	−2.69	0.07	−2.83
Warrensburg	0.58	−1.23	0.04	−2.16	3.30	+0.77	6.00	+2.88	4.11	−0.52	3.91	−0.90	1.68	−2.43	4.22	+0.69	3.89	+0.26	0.98	−1.59	0.07	−1.70	0.21	−1.66
Warsaw	1.34	−0.90	0.38	−2.42	1.56	+1.46	5.71	−1.69	5.06	−0.11	0.78	−4.65	2.47	−2.21	6.38	+2.40	4.75	+0.75	0.99	−2.04	0.39	−1.95	0.80	−1.64
Waverly	0.68	......	0.08	......	2.71	......	8.25	......	5.48	......	2.07	......	0.71	......	4.02	......	3.79	......	1.61	......	T.	......	0.48	......
Northwest Plateau.																								
Avalon	0.70	−1.04	T.	−2.18	2.63	−0.11	7.20	+4.00	1.65	−0.50	2.25	−2.13	2.58	−1.76	2.85	−0.73	3.28	−1.80	1.65	−1.47	0.05	−1.88	0.52	−1.09
Bethany	0.50	−0.88	0.05	−1.51	1.31	−0.90	6.83	+3.87	2.87	−2.18	12.08	+7.91	0.57	−4.07	3.37	−0.59	3.52	−0.35	1.13	−1.11	T.	−1.55	0.10	−1.45
Chillicothe	......	......	......	......	......	......	......	......	......	......	7.70	......	2.54	......	3.01	......	4.24	......	0.98	......	0.00	......	0.17	......
Conception	0.45	−0.68	T.	−1.28	0.76	−1.03	4.66	+1.94	3.42	−1.21	12.22	+7.76	0.13	−4.23	1.89	−1.75	4.01	+0.22	1.30	−1.20	0.03	−1.21	0.35	−0.73
Gallatin	0.45	−0.81	0.03	−1.66	2.89	+0.26	6.34	+2.73	2.94	−2.79	9.00	+3.97	1.71	−3.05	4.51	+0.31	3.78	−0.46	1.74	−0.87	0.05	−1.74	0.41	−1.18
Grant City	0.50	−0.41	T.	−1.15	1.00	−0.98	5.26	+2.38	2.66	−1.97	12.62	+8.28	2.20	−2.89	3.29	−0.29	2.08	−1.96	0.41	−2.37	0.20	−1.22	0.25	−1.02
Kansas City	0.62	−0.51	0.07	−1.52	2.89	+0.07	6.87	+3.58	5.74	+0.63	3.31	−1.32	1.02	−3.82	3.27	−1.18	3.33	−0.43	1.65	−0.56	0.06	−1.79	0.45	−0.91
Kidder	0.52	−0.81	0.00	−1.61	2.16	0.01	5.11	+2.28	1.05	−1.41	3.52	0.86	1.16	−3.05	5.68	+1.78	3.30	−0.78	1.60	−1.17	0.02	−1.67	0.27	−1.18
Lexington	0.71	−0.86	0.01	−2.10	2.69	+0.12	7.43	+1.22	3.90	−1.24	2.91	−2.00	0.47	−1.73	2.83	−0.40	2.59	−2.03	1.57	−1.09	0.08	−1.79	0.51	−1.27
Liberty	0.29	−1.06	0.05	−1.96	2.12	−0.30	7.24	+4.22	5.18	0.06	1.58	−0.21	1.45	−3.30	3.52	−0.39	3.55	−0.65	2.48	+0.05	0.02	−1.64	0.50	−0.99
Maryville	0.60	−0.51	0.10	−1.15	1.22	−0.69	4.07	+1.37	1.76	−0.99	13.51	+8.99	0.67	−5.21	3.26	−0.77	2.31	−2.00	0.97	−1.91	0.17	−1.26	0.45	−0.73
Oregon	0.40	−1.07	0.10	−1.33	1.06	−0.98	4.53	+1.29	2.82	−2.04	9.07	+1.33	1.38	−3.61	3.91	−0.18	2.96	−0.73	0.83	−1.77	T.	−1.63	0.25	−1.27
St. Joseph	0.38	−0.70	0.02	−1.34	1.48	−0.51	4.77	+1.90	3.22	−1.04	6.21	+1.19	1.04	−2.96	5.08	+1.43	1.60	−1.74	0.80	−1.82	0.04	−1.67	0.16	−0.96
Tarkio	0.33	−0.51	T.	−1.14	1.17	−0.62	3.87	+0.92	3.95	−0.65	7.17	+2.54	0.37	−3.58	2.41	−1.71	1.88	−1.58	0.96	−1.60	0.18	−1.06	T.	−0.99
Trenton	0.96	−0.50	0.37	−1.37	3.09	+0.88	7.26	+4.12	2.89	−2.46	8.39	+1.46	1.52	−2.60	1.36	−0.85	3.58	−0.73	1.85	−0.69	T.	−1.65	0.17	−1.38

Monthly and Annual Mean Temperatures for 1917, with Departures from Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
theast Plain.																										
ck	29.6	+2.9	27.0	−1.5	43.0	+1.9	50.2	−4.2	58.0	−6.4	71.4	−1.4	78.4	+3.2	73.2	−0.2	68.0	+1.9	50.1	−4.7	45.9	+4.7	21.6	−9.0	51.4	−1.1
Hill	31.5	+2.6	29.1	+1.8	44.1	+3.5	51.4	−2.2	58.6	−5.6	69.9	−2.4	75.3	−0.7	73.6	−2.3	69.4	+0.8	49.8	−7.1	46.0	+2.3	23.9	−6.8	51.9	−1.3
na	31.0	+3.8	28.3	−1.8	41.4	+3.0	52.0	−2.3	58.6	−5.9	70.9	−3.6	77.6	+0.2	72.3	−2.4	67.5	−0.3	48.6	−6.2	45.4	+3.0	24.0	−8.9	51.7	−1.9
e	28.9	+1.2	26.3	−2.8	42.6	+0.9	50.6	−4.3	58.0	−6.5	70.4	−2.8	78.1	+0.7	71.6[d]	−4.6	68.2	−0.2	47.9	−8.9	44.2	+1.6	21.1	−10.1	50.7	−3.0
	32.0	+2.2	29.4	−2.8	44.8	+1.0	52.7	−1.7	58.4	−6.7	70.9	−2.4	77.6	−0.3	72.0	+4.3	67.9[a]	−0.9	49.8[a]	7.8	44.2	−0.3	24.6	−9.1	52.0	−2.0
bal	28.7	+2.0	25.6	−3.5	43.0	+1.4	50.1	−3.5	58.6	−5.8	70.4	−2.9	77.2	−0.2	72.1	−2.9	66.4	−1.5	47.9	−8.0	44.5	+4.0	22.3	−9.0	50.6	−2.5
n City	32.0	+1.8	28.5	−2.3	44.6	+1.9	52.2	−4.6	59.2	−6.0	71.6	−2.4	78.2	+0.1	73.5	−3.2	67.9	−1.1	49.0	−7.7	44.9	+0.5	21.9	−11.1	52.0	−2.8
lle	....	.....	.....	.....	.....	.....	47.4	−4.5	56.8	−5.6	68.2	−3.7	75.5	−0.6	71.8	−2.0	66.2	+0.2	47.0	−7.0	44.8	+4.5	21.2	−8.2	.....	.....
ma	31.2	+3.3	28.9	+0.5	44.8	+2.5	52.6	−1.1	59.2	−4.7	70.1	−1.6	76.4	−0.4	72.4	−2.3	65.0	−2.9	46.2	−9.9	42.4[a]	−1.7	23.1	−7.9	51.0	−2.2
	27.2	−1.6	23.4	+4.8	40.3	−2.0	47.9	−6.0	57.2	−6.9	70.3	−2.1	76.0	−1.4	72.3	−4.4	66.0	−2.4	46.5[a]	−10.8	.....	.....	.....	.....	.....	.....
	30.4	+1.8	25.8	−2.9	43.6	+2.3	51.1	−3.2	58.4	−6.1	71.2	−2.4	78.1	+0.8	73.0	−3.1	66.8	−2.0	47.6	−8.9	41.4	+1.3	22.0	−10.2	51.0	−2.7
d	35.0	+2.9	30.6	−1.5	46.4	+1.9	53.4	−2.9	59.6	−6.1	71.6	−2.4	78.2	+0.1	74.0	−2.8	68.4	−1.9	50.4	−8.2	47.0	+0.8	25.7	−9.0	53.1	−2.4
a	26.6	−1.8	22.5	−4.3	40.8	+1.4	49.2	−5.4	58.8	−7.6	70.4	−4.0	76.8	−2.3	72.2	−4.5	65.5	−3.1	45.4	−12.0	42.6	−0.5	19.5	−10.7	49.2	−4.6
erine	27.6	.....	25.8	.....	42.2	.....	48.6	.....	56.8	.....	68.9	.....	75.8	.....	72.2	.....	67.4	.....	48.4	.....	44.6	.....	22.2	.....	50.4	.....
les	33.9	+2.7	31.1	−0.6	46.2	+2.7	53.4	−2.2	59.1	−3.3	71.9	−2.1	77.8	+0.1	74.6	−1.9	68.4	+1.2	50.6	−7.3	46.4	+1.1	25.1	−9.9	53.2	−1.6
s(1)	34.8	+3.8	30.4	−3.1	46.6	+3.1	53.7	−2.4	60.6	−5.9	73.3	−1.8	79.0	−0.1	75.3	−1.9	69.0	−1.0	51.1	−7.3	47.7	+4.3	26.8	−8.7	54.0	−1.8
s(2)	33.8	.....	29.4	.....	46.0	.....	53.0	.....	60.0	.....	72.8	....	78.7	.....	74.7	.....	69.0	.....	50.2	.....	46.2	.....	25.0	.....	53.2	.....
ville	29.4	+1.0	23.2	−4.1	41.8	+0.4	50.8	−2.4	56.4	−7.9	66.8	−6.0	74.8	−2.4	70.8	−5.7	67.3	−1.4	48.6	−8.6	44.2	−0.4	22.4	−8.0	49.7	−3.8
ille	23.7	+0.4	19.6	−4.7	37.5	+0.1	45.6	−5.5	55.3	−7.3	66.2	−5.8	71.8	−1.9	70.7	−4.6	64.4	−2.9	41.4	−11.0	43.3	+3.3	18.0	−9.4	47.0	−4.1
ton	30.2	+1.0	26.2	−3.3	43.6	+2.1	52.2	−2.6	59.2	−5.9	72.0	−1.4	78.3	+0.7	73.8	−2.6	68.6	−0.2	48.3	−7.3	45.2	+2.3	22.2	−9.9	51.6	−2.3
k, Ia	26.0	+2.3	22.7	−4.0	41.3	+3.3	48.6	−3.4	58.1	−5.1	69.0	−3.5	76.8	−0.2	72.3	−2.7	65.7	−0.7	46.3	−8.2	41.4	−5.0	20.9	−8.5	49.3	−1.3
st Lowlands.																										
ll	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ersville	43.0	+3.8	41.6	+3.8	52.0	+1.3	61.6	+1.7	64.9	−4.4	76.8	−0.4	81.9	+1.8	80.6	+1.5	75.8	+2.7	58.6	−2.3	50.6	+0.9	32.9	−7.0	60.0	+ 0.3
an	40.1	+3.0	39.0	+1.6	50.2	+1.0	58.4	+0.4	61.7	−5.1	73.8	−0.9	78.3	+0.5	71.9	−2.2	68.7	−2.6	52.8	−5.0	46.7	−1.3	29.4	−8.1	56.2	−1.6
	38.8	+4.5	34.6	−0.4	48.8	+2.0	56.6	−0.4	60.2	−5.6	72.4	−1.7	77.5	+0.4	74.6	−1.4	68.8	−1.3	51.2	−6.4	45.0	1.8	26.4	−10.4	54.6	−1.9
Hill	38.8[a]	+4.1	36.1	+1.2	48.6	+1.8	57.2	+0.7	57.4[l]	−8.7	70.4[e]	−3.8	75.4	−1.7	74.4	−2.3	69.2	−1.6	53.2	−4.6	47.0	+3.1	28.6	−7.3	54.7	−1.6
Bluff	37.8	+0.7	35.1	−0.2	47.0	−1.4	56.6	−3.6	60.6	−8.1	72.4	−3.5	77.0	−2.1	73.1	−5.1	68.4	−3.5	51.6	−8.6	45.6	−2.1	27.6	−9.6	54.4	−3.9
	41.0	+3.8	38.0	+1.7	50.8	+2.6	58.8	+0.9	61.7	−7.1	.....	.....	.....	.....	78.7	+1.4	75.2[a]	+4.8	.....	.....	.....	.....	.....	.....	.....	.....
ill	39.2	+4.4	35.6	−2.0	49.4	+2.4	58.0	−0.3	61.8	−5.7	74.2	−1.0	78.6	−0.6	76.1	−0.9	70.6	+0.4	53.6	−5.5	48.2	+1.3	28.6	−9.9	56.1	−1.4
rk Plateau.																										
ee	38.1	+3.3	34.6[b]	+0.4	48.4	+1.2	56.2	−0.9	60.0[b]	−5.4	70.8[a]	−2.1	75.4[a]	−0.8	72.9	−3.0	69.0[b]	−0.9	50.8[c]	−7.3	48.1[b]	+1.5	28.0	−7.8	54.4	−1.8
	35.2	+0.6	32.2	−1.9	45.6	0.0	52.9	−3.7	57.4	−7.7	67.5	−5.3	74.1	−3.0	69.8	−7.3	65.6	−4.5	47.6	−11.0	45.0	−2.2	26.0	−10.1	51.4	−5.7
le	37.5	.....	35.6	.....	48.4	.....	56.0	.....	57.6	.....	67.8	.....	74.3	.....	72.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
r	38.8[e]	+7.3	36.4	+6.4	40.7[i]	−3.0	56.8[f]	+1.0	58.8	−6.9	72.2	−0.5	81.4	+4.3	75.0	−1.3	65.3[a]	−3.9	49.2	−5.1	53.7[i]	+6.9	....	.....	.....	.....
	....	.....	37.6[b]	+3.8	51.2	+2.6	56.8[a]	−0.8	60.0[a]	−6.0	69.8	−3.5	77.6	+0.1	73.0	−4.5	68.0[a]	−3.4	53.0[a]	−7.3	47.2	−2.7	28.3[c]	−9.6	....	.....
	33.4	+1.2	29.3	−2.4	43.2	+0.2	51.4	−5.0	58.5	−6.6	70.2	−3.4	76.6	−0.3	72.0	−4.5	67.3	−2.6	49.6	−8.5	45.4	−0.2	24.2	−10.7	51.8	−3.6
ity	38.1	.....	37.8	.....	48.8	.....	57.0	.....	61.6	.....	73.2	.....	77.8	.....	73.0	.....	69.4	.....	51.9	.....	49.0	.....	27.9	.....	55.5	.....
	35.9	+1.9	31.8	−2.6	45.9	−0.8	54.2	−2.3	58.8	−7.0	70.8	−2.3	76.6	−0.1	71.9	−4.5	66.4	−4.1	49.4	−8.6	45.6	−2.0	25.2	−10.5	52.7	−3.6
nd	35.6	+2.0	33.6	+1.3	46.0	+1.4	53.2	−1.7	57.7	−7.2	69.2	−3.2	75.4	−0.1	71.7	−2.8	65.7	−2.0	49.6	−5.9	45.0	+0.3	25.9	−8.5	52.4	−2.2
er	37.4	+1.1	38.0	+0.1	49.0	+0.6	57.2	−2.9	59.6	−7.9	73.2	−2.6	79.0	−0.3	75.2	−2.5	69.0	−2.8	53.7	−6.6	51.2	+3.1	32.3	−7.4	56.2	−2.3
n	38.0	+5.4	34.8	+2.6	47.4	+1.3	55.0	−1.0	59.4	−5.5	70.7	−1.5	76.2	+0.3	72.0	−5.1	66.8	−2.1	50.8	−6.3	48.0	+1.6	28.0	−8.0	53.9	−1.5
	35.4	+3.1	33.5	+0.2	45.8	+1.2	54.4	−1.2	58.5	−9.1	70.6	−1.5	74.8	−1.0	71.5	−4.0	65.7	−2.1	50.2	−5.8	44.5	+0.5	25.2	−9.2	52.5	−2.4
mong	40.2	+3.2	38.3	+1.7	49.7	+0.3	57.3[b]	−0.7	60.2	−6.8	72.6[c]	−1.7	77.7	−0.3	74.3	−3.3	70.0	−1.2	53.6	−6.2	49.7	−0.1	29.6	−7.9	56.1	−1.9
n	36.8[g]	+3.2	31.0	−2.9	45.4	+0.2	52.4	−3.9	58.0	−8.0	70.6	−2.8	76.8	−0.1	71.9	−4.5	66.0	−4.0	48.9	−9.3	45.6	−0.7	25.0	−10.4	52.4	−4.6
od	37.2	+3.1	33.8	−1.2	48.8	+1.7	55.3	−1.3	60.0	−4.5	71.6	−2.7	78.0	+0.9	73.4	−3.5	68.8	−3.2	52.6	−5.4	47.9	−0.7	27.8	−8.1	54.6	−2.1
un Grove	35.0	+1.0	31.7	−1.8	43.6	−2.5	52.8	−2.1	57.2	−7.2	69.6	−2.1	75.0	−1.0	71.5	−3.4	66.4	−2.6	49.2	−8.4	46.1	−1.3	24.8	−9.9	52.0	−3.4
Vernon	34.8[i]	+0.9	35.2	+1.7	49.2	+1.7	56.0	+0.3	.....	.....	.....	.....	.....	.....	.....	.....	67.0	−3.8	.....	.....	.....	.....	25.0	−10.5	....	.....
	38.4	+3.0	35.8	−0.5	49.9	+2.2	56.8	−1.4	59.4	−6.9	71.2	−2.7	76.9	−0.7	73.4	−3.4	68.0	−2.7	52.2	−7.1	47.2	−0.2	29.8	6.9	54.9	−2.3
	34.8	+3.3	30.4	−5.0	44.8	+0.5	53.8	−1.7	59.0	−5.6	71.8	−0.9	77.6	+0.5	73.7	−1.7	68.0	+0.2	49.2	−6.0	46.2	+1.7	24.8	−8.7	52.8	−2.0
eld	36.9	+4.7	33.0	−0.6	47.0	+3.5	54.0	−1.7	59.1	−5.5	70.9	−1.4	76.5	+0.1	72.8	−2.0	68.0	+0.1	50.5	−6.8	47.4	−3.0	26.5	−7.0	53.5	−1.3
thwest Plain.																										
	32.7[d]	+1.3	31.2	−2.3	46.3	+4.0	52.6	−2.8	56.2	−7.6	70.2	−3.1	76.8	−0.5	72.8	−3.5	67.7	−1.3	51.1	−5.9	46.2	−0.1	25.8	−7.1	52.5	−2.4
on City	30.0	−1.8	32.4	+0.7	46.8[a]	+2.9	55.0	−1.1	59.6	−5.7	72.7	−2.0	79.0	+0.8	75.8[h]	−1.8	67.8[i]	−2.9	52.0	−7.1	47.4	+1.3	32.8[c]	−1.5	54.3	−1.5
	34.9	+3.2	31.6	+0.2	46.5	+3.2	55.6	−0.4	59.9	−5.3	72.9	−0.2	80.4	+3.4	71.0	−5.7	69.1	−1.3	50.9	−7.5	47.0	−0.6	26.8	−7.8	53.9	−1.6
nville	31.9	+4.5	27.0	−2.5	42.0	+1.5	51.3	−3.0	57.4	−6.7	71.2	−2.2	79.2	+1.5	73.2	−2.4	66.8	−1.7	48.0	−8.0	44.4	+2.0	22.8	−8.6	51.3	−2.1
	35.1	+2.4	34.9[a]	+0.8	49.6	+3.9	55.8	−1.2	60.6	−5.4	72.8	−1.6	79.2	+0.8	75.2	−2.1	70.7	0.0	53.2	−5.6	47.5	+0.8	27.8	−7.7	55.0	−1.2
te	31.4[a]	+2.1	28.7	−2.5	44.3	+1.2	52.0	−4.3	56.9	−8.6	70.2	−4.5	77.4	−2.1	72.2	−4.3	67.4	−3.6	50.0	−8.2	45.4	+0.8	23.8	−11.3	51.6	−3.8
ll	31.0[c]	−3.3	28.7	−0.3	44.2[b]	+2.4	51.5[a]	−3.3	58.5[a]	−5.7	70.9	−2.0	78.4[c]	+1.4	71.4[b]	−4.1	67.9[a]	−0.4	49.0[a]	−7.6	45.2[a]	−0.8	24.5	−7.2	51.8	−2.0
	37.2	+5.9	34.4	+3.0	47.8	+4.2	55.0	−0.1	59.5	−5.3	72.4	−1.0	78.3	−2.2	73.8	−3.0	70.4	+1.3	53.5	−3.3	47.5	+3.4	27.4	−6.5	51.8	−0.3
sburg	33.0	+4.1	29.8	−1.3	45.6	+2.5	53.2	−3.2	59.3	−6.1	73.8	−0.3	79.6	+1.5	74.8	−2.2	70.9	0.0	51.4	−6.8	47.7	+2.7	25.4	−8.4	53.6	−1.5
s	34.6	+0.8	31.6	−1.7	46.4	+0.2	54.3	−2.1	58.6	−7.4	71.2	−2.5	78.8	+0.6	75.2	−2.2	70.0	−0.6	52.4	−6.7	45.2	−3.1	26.7	−8.4	53.8	−2.8
hwest Plateau.																										
	31.6	+3.8	29.0	+1.6	45.7	+4.4	51.2	−2.5	59.6	−3.6	73.6	+0.5	82.1	+3.2	74.6	−2.0	70.0	+0.4	50.8	−7.7	47.5	+3.7	24.4	−8.0	53.2	−0.5
y	25.4	+0.7	23.8	−2.4	42.2	+3.3	48.9	−2.3	56.6	−5.8	69.8	−2.1	76.8	+1.1	71.9	−2.8	67.1	+0.4	46.8	−7.5	42.0	−1.4	18.4	−12.5	40.8	−2.6
othe	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	69.8	.....	76.8	5.0	76.0	+0.1	68.2	−2.2	47.0	−12.3	43.0	+0.6	....	.....	.....	.....
tion	26.0	+1.2	24.0	−2.4	41.3	+2.9	48.3	−4.0	57.5	−4.2	70.0	−1.1	78.7	+2.8	72.4	−1.7	66.6	−0.4	47.4	−8.0	45.9	+4.5	19.6	−10.1	49.8	−1.7
City	25.7	+1.1	24.8	−1.8	40.3	+0.4	48.4	−3.9	55.1	−7.0	69.2	−1.7	77.2	+1.6	72.2	−2.8	67.2	+0.2	48.0	−7.2	41.8	+2.0	20.4	−7.6	49.1	−2.2
s City	31.0	+4.8	29.4	−0.5	44.2	+3.4	52.0	−2.3	58.8	−5.7	72.7	−0.3	79.9	+2.3	73.6	−2.2	68.8	+1.3	50.4	−5.4	47.7	+6.2	23.4	−8.1	52.7	−0.6
	30.9	+4.4	27.2	+0.5	43.6	+3.2	50.5	−2.4	58.0	−2.0	70.1	−2.0	72.8	−2.7	67.6	+0.1	49.9	−6.3	46.9	−6.3	46.9	+4.6	23.0	−6.5	51.5	−0.9
gton	31.0	+3.5	28.0	−1.0	43.8	+1.4	51.2	−3.4	59.2	−5.3	71.9	−0.8	79.4	+2.6	73.8	−2.0	68.9	+0.3	48.6	−9.0	47.2	+3.2	23.6	−8.1	52.2	−1.6
	30.0[f]	+1.2	.....	.....	47.4[f]	+5.3	53.0[f]	−2.5	59.2	−5.5	73.1[a]	−0.6	79.0[a]	+1.3	78.5[a]	+1.9	68.7[b]	−0.8	50.7[c]	−6.7	46.4[h]	+2.7	26.1[f]	−5.8	.....	.....
ille	23.6	+1.3	19.9	−3.4	38.0	+1.7	46.7	−3.9	56.2	−4.8	68.2	0.7	77.0	+1.5	70.5	−3.2	64.6	−0.8	44.8	−8.4	42.8	+3.8	17.5	−8.8	57.5	−2.1
	26.1	+2.3	25.3	−2.7	41.0	+2.1	48.3	−4.4	55.9	−7.4	68.8	−3.5	76.7	+1.3	70.0	−5.1	65.3	−1.8	46.8	−8.1	45.0	+4.8	19.6	−8.9	49.1	−2.6
ph	28.4	.....	27.0	.....	42.6	.....	50.7	....	58.3	.....	72.0	.....	79.7	.....	72.8	.....	67.8	.....	48.4	.....	46.4	...	21.8	.....	51.3	.....
	25.9[a]	+3.9	25.4	−1.4	41.2	+2.4	49.2	−4.1	57.2	−6.4	70.4	−2.4	77.6	+0.8	71.2	−4.7	66.0	−0.2	47.6	−7.9	44.8	+4.7	20.0	−5.2	49.7	−1.7
n	27.0	0.0	25.5	−2.2	42.0	+1.8	49.8	−3.3	58.0	−5.9	70.0	−2.4	76.9	+0.4	71.9	3.2	66.2	−1.3	47.9	−8.6	44.4	+1.8	21.0	−8.8	50.0	−2.6

Monthly Maximum Temperatures for the Year 1917, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		Dece
	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum
Northeast Plain.																							
Brunswick	64	28	68	25	83	30	83	24	89	18	99	30	101	30	97	3	92	3†	86	15	79	6	69
Clifton Hill	64	28	70	22	83	30	83	18	89	19	94	30	104	30	101	3	100	3	84	4	75	4	68
Columbia	66	28	68	25	82	30	86	23	89	19	96	30	102	30	97	3	92	7	84	15	75	4	72
Fayette	66	28	68	25	82	30	83	23	87	18	96	30	103	30	.....	.....	94	3	84	4†	75	4	70
Fulton	65	28	68	25	83	31	88	23	90	18†	95	30	102	30	99	3	96	3	89	15	77	7	75
Hannibal	62	28	66	25	80	30	84	18	88	19	92	30	102	30	95	4	91	7	84	17	75	7	66
Jefferson City	65	28	68	25	83	31	87	23	89	19	96	30	101	30†	100	3	95	3	88	15	74	7†	73
Kirksville	.....	.....	.....	.....	.....	.....	80	18	86	18†	93	30	99	29†	95	4	89	3	80	15†	75	7	64
Louisiana	62	29	66	25†	82	31	85	18	87	19	91	25	101	31	96	1	88	1†	82	17	73	4†	62
Macon	64	28	67	25	81	30	81	18	87	18†	92	30	102	30†	98	4	94	3	85	15	.....	.....	.....
Mexico	65	28	67	25	86	31	85	17†	90	18	95	30	107	31	100	3	93	3	85	15	75	9	72
Oakfield	66	21	69	25	84	31	86	23	90	19	95	25†	100	13†	97	1	91	2†	88	15	76	7	72
Palmyra	61	28	65	25	79	20†	83	18	87	18†	93	30	102	30	98	4	92	1	82	17	73	7	66
St. Catherine	60	28†	63	25	79	30	79	18	85	19	91	30	97	30†	94	3	91	3	81	15	74	7	65
St. Charles	66	21	68	25	83	31	89	17	89	19	95	25†	100	31	96	4	93	2	88	14	78	7	65
St. Louis(1)	65	21	68	25	80	31	84	23	90	19	94	26	96	13	94	5	91	2	85	15	74	7	66
St. Louis(2)	65	21	68	25	80	31	85	18†	90	19	95	25	96	13†	93	5	92	2	86	15	73	7	66
Steffenville	62	29	63	17	80	30	85	17†	91	17†	95	30	105	30†	104	3	95	1†	89	15	78	6	68
Unionville	60	28	64	25	76	30	82	18	86	18	93	30	103	30	97	4	93	3	80	4†	74	6	60
Warrenton	64	21	67	25	82	31	88	23	91	19	95	24	101	30†	99	3	95	7	86	15	74	7	70
Keokuk, Ia	60	28	62	25	77	30	82	18	87	19	91	25	100	30	93	4	90	1	79	17	74	7	62
Southeast Lowlands.																							
Cardwell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	103	6†	.....	.....	.....	.....	.....	.....	.....
Caruthersville	73	29†	80	26	82	31	89	18	91	31	98	24†	104	1	104	1†	101	1	93	16	78	4†	78
Doniphan	74	31	79	26	78	26†	84	18†	86	26†	95	25†	98	1	96	1	90	7	84	15†	73	7†	68
Jackson	71	29	78	26	79	26	86	23	86	19	99	24	98	31	99	1	93	2†	89	15†	78	4	69
Marble Hill	76	31	80	26	85	30	85	21†	.....	.....	.....	.....	93	7†	96	5	94	5	87	15	78	7	72
Poplar Bluff	75	29	77	26	79	30	87	24	86	26	91	26	96	1	94	1	91	2†	87	15†	78	8†	70
Sikeston	75	31	77	26	80	31	84	24	84	18	96	27	98	1	94	4†	94	2†	.....	.....	.....	.....	.....
Cairo, Ill	70	31	75	26	78	31	83	18	86	31	94	26	93	1	94	1	90	1	84	15	74	7	69
Ozark Plateau.																							
Birchtree	70	28	82	26	78	11	84	23	85	25	93	24	95	7	93	1	91	3†	87	15	77	7	70
Bolivar	62	29†	66	25†	76	30	78	21	82	17†	93	30	92	31	86	3	86	3†	82	15	68	11†	68
Cassville	76	30	76	27	80	31	81	24	84	31	93	30	95	1	90	1†	.....	.....	.....	.....	.....	.....	.....
Crocker	64	26†	68	25	74	28	84	18	90	19	93	12†	95	25†	97	2	87	1†	77	5†	74	8	.....
Dean	.....	.....	74	25†	83	25†	84	22	87	19	95	29	100	8	93	1†	92	7	89	10	77	10	73
Eldon	67	29	67	22	79	31	84	17	89	18	99	30	99	30†	97	3	93	7	87	15	79	5	74
Fruit City	69	29†	81	26	78	30	86	23	87	19	98	26†	101	1	94	1	88	7	88	15	76	7†	71
Gano	66	29	73	26	82	31	85	19†	90	19	97	27	97	31	96	1	90	7	88	15	76	7	71
Goodland	68	29	71	26	78	31	85	23	87	19†	97	27	100	31	100	1	92	2†	89	15	77	7	71
Hollister	74	29	76	23	78	12†	86	23	90	26	100	30	102	1	98	5	96	7	84	4†	78	6†	66
Houston	67	4†	76	26	80	31	83	23	88	30	92	26	96	1	91	1	90	2	86	16	74	6†	72
Ironton	69	29	79	26	79	31	86	23	87	19	95	26	97	1	94	1	91	2†	87	15	76	7	70
Koshkonong	72	29	82	26	79	11	85	21	85	18†	94	23†	98	1	94	2†	92	2†	87	15	77	16	71
Lebanon	68	29	70	25	81	31	87	24	89	18†	97	30	97	3	94	1	90	2†	87	15	75	7†	78
Lockwood	67	28	74	23	82	30	83	23	88	18	96	30	97	7	91	3†	93	1	87	16	75	10	72
Mountain Grove	68	29	75	26	80	31	81	23	84	19	93	27	95	13	92	1	90	2	84	15	76	6†	68
Mount Vernon	68	30	73	22	82	31	82	23	.....	.....	.....	.....	.....	.....	94	1	90	6	.....	.....	.....	.....	70
Neosho	74	30	72	22	83	31	83	23	86	18	95	30	97	8	95	5	91	7	87	15†	76	10	73
Rolla	68	28	70	25	82	31	86	23	90	18	98	26	96	8†	94	2†	94	2	86	15	76	5†	72
Springfield	65	29	70	25	80	31	82	23	85	19	94	30	94	7	90	5	88	3	84	15	75	10	71
Southwest Plain.																							
Amoret	68	29	75	22	82	30	85	23	84	20	99	30	100	8	98	4†	95	7	88	15†	74	4†	70
Appleton City	70	29	74	22	83	30	85	23	88	18	100	30	97	6†	96	3†	95	7	87	15	75	4	70
Clinton	68	28†	71	25	85	30	89	23	91	18	101	30	102	30	100	2†	96	7	86	15†	76	4	72
Harrisonville	65	29	74	22	82	30	87	23	87	19	103	30	104	30	102	5	95	7	91	4†	75	8	68
Lamar	72	29	75	21	85	28	86	23	89	18†	100	30	100	7	98	2†	98	7	91	15†	77	4†	72
Lamonte	67	29	70	25	83	30	85	23	89	18	100	30	101	30	99	3	94	7	85	15	76	4	71
Marshall	64	28	68	22†	83	30	84	23	87	18†	99	30	103	30†	103	3	93	7	83	15†	73	4†	69
Nevada	68	29	74	22	81	30	84	25†	89	18	97	30	98	13†	95	3†	94	7	85	16	76	9	69
Warrensburg	67	29	69	25	83	30	88	23	91	18	103	30	104	31	101	2	97	7	86	15	76	4	72
Warsaw	70	29	71	25	84	30	87	23	90	18	102	30	102	31	102	3	98	7	91	2	80	4	82
Northwest Plateau.																							
Avalon	62	28	67	25	82	30	83	24	88	19	96	30	102	30	100	3	93	1	85	15	76	7	66
Bethany	62	3	62	22†	86	30	76	19†	88	19	97	30	104	20	99	4	91	7	80	2†	72	8	60
Chillicothe	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95	24	102	31	98	3†	92	7	83	4	76	8	.....
Conception	60	28	67	22	83	30	83	22	90	19	98	30	104	30	100	4	93	3	80	14	75	7†	53
Grant City	59	29	64	22†	82	30	82	22	86	19	97	30	105	30	98	4	94	3	81	4	75	7	56
Kansas City	65	28	73	22	81	30	85	23	86	18	102	30	100	30	98	3	92	7	83	4	74	4	68
Kidder	63	28	72	22	83	30	84	18	88	19	100	30	105	31	99	4	88	7†	81	15	74	7†	62
Lexington	62	28	69	25	82	30	84	23†	90	19	100	30	102	31	100	3	93	7	85	4	75	6†	68
Liberty	66	29	.....	.....	85	30	86	22	91	19	102	30	104	30	102	4	93	3†	86	16†	76	4†	68
Maryville	58	28	65	25	84	30	85	22	89	17	99	30	105	30	97	4	92	3†	81	14	77	7	57
Oregon	56	28	66	22	81	30	81	22	85	19	96	30	102	30	93	4	89	3	77	4†	73	8	58
St Joseph	63	28	70	22	82	30	85	22	90	19	101	30	103	30	98	4	91	3	81	15	75	8	62
Tarkio	56	28	68	25	84	30	87	22	91	19	102	30	103	31	98	4	93	5	81	14	75	7	59
Trenton	57	28	61	25	80	31	80	18	87	19	94	30	99	30†	96	1	88	7	76	4	70	7	58

† Also on other dates.

Monthly and Annual Mean Temperatures of Each Section for the Year 1917, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annu
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature
Northeast Plain	29.9	+1.9	26.7	−2.6	43.5	+1.6	50.9	−3.4	58.3	−6.2	70.5	−2.8	77.1	−0.2	72.8	−3.1	67.3	−1.0	48.3	−8.3	44.9	+2.0	25.1	−9.7	51.1
Southeast Lowlands	39.8	+3.5	37.2	+0.8	49.5	+1.4	58.2	−0.1	61.2	−6.4	72.8	−2.3	77.6	−0.5	76.3	−1.3	71.0	−0.2	53.5	−5.4	48.0	0.0	28.9	−8.7	56.0
Ozark Plateau	36.7	+2.8	34.2	0.0	46.9	+0.7	54.9	−1.8	59.0	−6.7	70.8	−2.4	76.7	−0.1	72.8	−3.6	67.5	−2.5	50.7	−7.2	47.4	+0.2	26.9	−8.9	53.6
Southwest Plain	33.2	+2.9	30.9	−0.7	45.5	+2.5	53.6	−2.2	58.6	−6.4	71.6	−2.1	78.8	+0.6	73.5	−3.0	68.7	−1.1	51.2	−6.7	46.4	+0.6	26.4	−7.5	53.3
Northwest Plateau	27.9	+1.9	25.8	−1.4	42.6	+2.7	49.9	−3.3	57.4	−5.6	70.7	−1.4	78.3	+1.2	73.0	−2.3	67.4	−0.4	48.2	−7.9	45.3	+3.2	21.2	−8.7	49.8
State	32.9	+2.5	30.5	−1.0	45.2	+1.7	53.2	−2.8	58.7	−6.2	71.0	−2.3	77.5	+0.2	73.3	−2.9	67.9	−1.2	49.8	−7.4	46.1	+1.5	25.5	−8.7	52.3

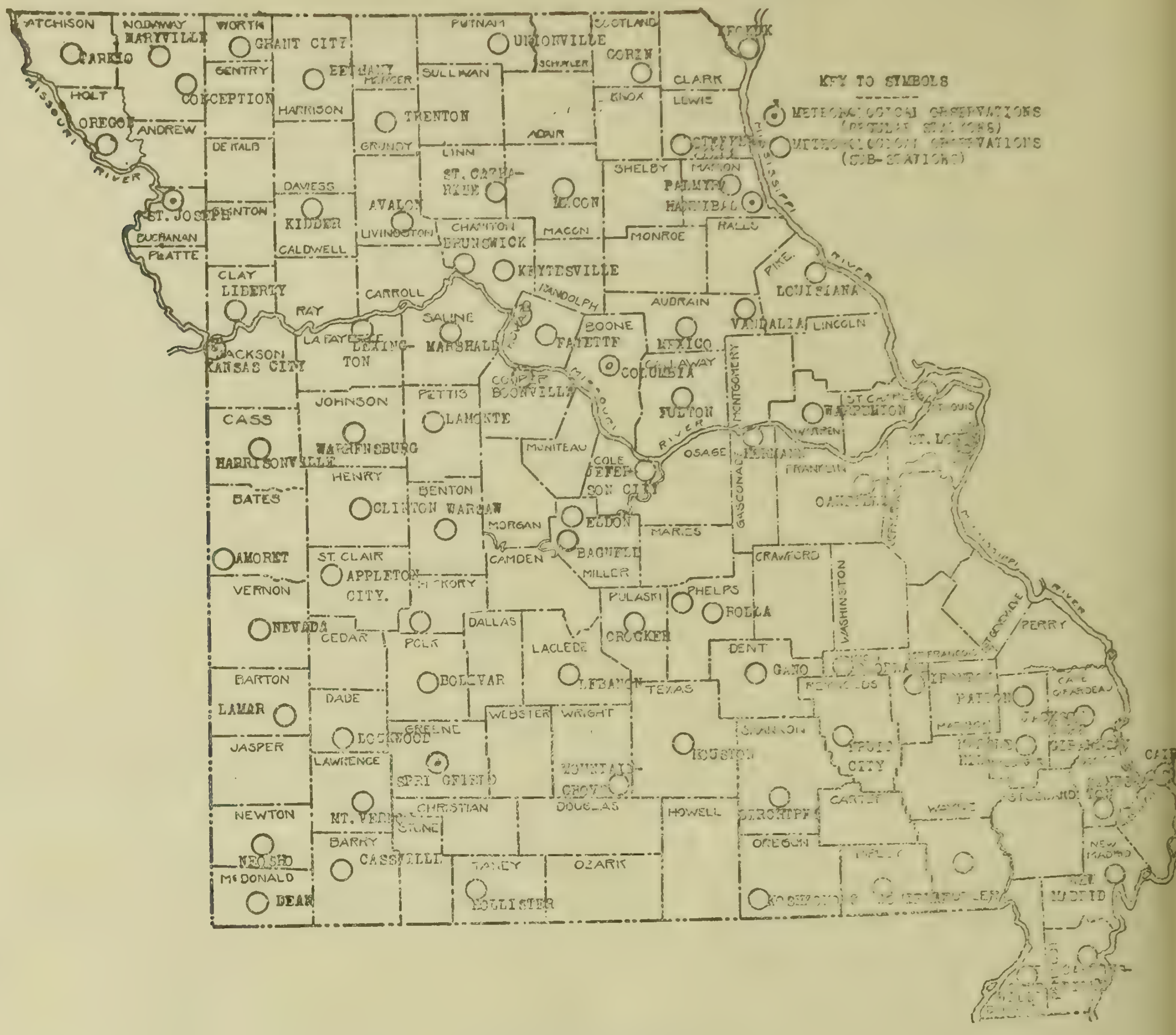
Monthly Minimum Temperatures for the Year 1917, with Dates.

ATIONS.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
st Plain.																								
k	3	14	-14	2	5	5†	26	9	35	1	51	3†	56	3	53	10†	41	11†	26	13†	11	25	-11	10
ull	2	14	-15	2	3	5	26	9	34	5	43	16	53	3	48	29	40	11	19	30	11	24	-13	10
a	3	21	-13	2	3	5	28	9	34	8	46	16	54	4	51	10	42	22	20	30	13	24	-9	10
	0	14†	-16	2	-3	5	26	9	35	5	46	16	55	4	52	30	42	11	19	30	13	24	-13	10
	2	14†	-12	2	4	5	27	9	31	5	40	16	48	4	48	30†	39	11†	18	13†	9	24	-15	10
l	1	16	-16	2	8	4	29	9	36	4	43	16	54	4	50	30	40	11	22	13	13	24	-11	29
City	3	16	-11	2	4	5	28	9	35	5	44	16	54	4	51	30	42	11	20	30	14	24	-10	10
e	...	...	...	...	...	...	23	9	33	5	43	16	51	4	48	10	37	11	16	30	13	24	-15	29
a	2	14	-13	2	8	4	26	9	36	7	38	16	50	4	47	30†	34	11	15	13	9	24	-15	11†
	0	14†	-16	2†	4	5	26	9	32	1	43	16	51	3†	51	10†	37	11	18	30	...	...	...	...
	3	14	-11	2	2	5	24	9	32	5	41	15	52	17	49	30	36	11	20	13†	11	24	-12	30
	4	14	-12	2	7	5	26	9	35	5	43	16	56	4	51	30	40	11	19	30	16	24	-10	10
	0	14	-17	2	6	4†	23	10	33	5	43	16	51	4	47	30	34	11	16	31	11	24	-14	30
ne	0	14	-17	2	0	5	24	9	32	5	45	15†	53	3	50	10	39	11	17	30	12	24	-15	29
s	3	16	-12	2	10	5	27	9	35	6	45	15†	54	4	51	30	39	11	21	30	13	24	-10	7
D	11	14	-10	2	14	4	30	9	38	5	49	16	62	4	58	29	43	11	25	30	24	24	-4	10
D	9	14†	-11	2	14	4†	30	9	38	5	49	16	61	4	56	30	43	11	24	30	21	24	-5	10
le	-2	13	-17	2	1	5	25	9	31	5	38	15†	42	3†	38	10	37	11	17	13†	10	24	-17	29
e	-8	14	-22	2	-1	5	19	9	32	6	41	15	45	3	45	29	36	11	15	29	12	24	-18	30
n	2	16†	-13	3	7	5	25	9	34	5	41	16	55	4	53	26†	38	11	19	30	14	24	-10	10
	0	16	-18	2	6	4	28	9	35	5	46	15	55	3	52	25	41	11	21	30	17	24	-14	29
Lowlands.																								
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	26	...	...	...	...	...	...	...	...
sville	5	14	4	2	12	5	36	3†	41	14	51	16	62	17	56	26	48	11†	26	30	23	24	9	9
	3	14	0	2	13	5	30	9	38	14	44	16	55	4	51	30	40	12	22	30	14	24	-16	9
	-10	14	-5	2	14	5	29	14	31	7	40	16	49	4	49	11	58	12	17	13	15	24	-23	9
ll	-9	14	-7	2	11	5	30	3†	37	6	40	16	55	3	50	11†	38	12	21	13	16	24	-12	10
ani	0	14	-1	2	12	5	28	9	35	23	41	16	54	4	50	26†	40	12	29	30	14	24	0	9
	8	14	-4	2	12	5	31	9	37	6	48	15†	56	4	58	11	45	11	...	...	...	...	...	...
	9	14	-4	2	16	5	33	8	41	5	50	16	63	16	58	30	45	11	28	30	23	24	-7	9
k Plateau																								
	4	14	-7	2	7	5	28	9	35	5	42	16	53	4	48	30	41	28	21	30†	11	24	-14	9
	8	14†	-10	2	4	5	25	9	32	5	42	16	52	4	45	30	41	28	19	30	13	24	-12	10
	10	13†	-5	1†	10	5	32	8†	31	8	40	15†	51	3†	45	30	...	...	...	...	...	...	...	...
	1	13	-11	2	1	5	...	...	33	5	53	1	68	1	47	29	40	29	26	18	27	17	...	...
	...	...	-5	1	16	4	25	9	30	1†	40	15†	52	3†	45	30	36	28	13	30	13	24	-21	9
	0	16	-13	2	0	5	25	9	30	5	39	1	52	3	48	30	40	11	17	30	11	24	-11	8†
y	5	14	0	14	8	5	30	9	38	23	44	16	56	4	50	30	45	12†	20	30	17	24	-10	9
	2	14	-11	2	2	5	27	9	32	5	38	16	55	5	48	30	38	28	20	30	15	24	-11	10
	0	14	-9	2	1	5	25	9	32	5†	41	16	44	4	44	30	35	12†	16	30	10	24	-22	9
	8	14	-4	2	12	5	30	9	36	1†	50	16	58	4	56	12†	42	14	20	30	18	24	0	10
	5	14†	-7	2	1	5	26	9	33	5†	42	16	49	4	44	30	39	48	19	24	12	24	-12	9
	-2	14	-10	2	5	5	25	14	33	6	35	16	43	4	44	11†	33	12	16	13	10	24	-13	9†
g	5	14	-3	2	11	5	29	9	36	5	44	16	55	4	50	30	44	11†	22	30	19	24	-10	9
	6	14	-9	2†	-1	5	24	9†	31	5†	42	15	54	3	47	30	40	28†	17	30	11	24	-13	10
el	8	22	-9	2	9	5	27	9	35	1†	46	16	59	3	49	30	44	22†	17	30	20	24	-12	9
e	6	14	-8	2†	2	5	26	9	34	5†	40	15	50	3	45	30	39	28	18	20	14	24	-12	9
on	7	14	-8	2	5	5	28	9	...	...	...	...	...	...	40	29	48	10	...	...	...	...	-11	9
	6	14	-6	2	11	5	25	9	30	8	40	15	51	3	43	30	37	28†	14	30	15	24	-23	9
	5	14	-13	3	3	5†	28	9	33	5	40	16†	51	4	51	25†	41	11†	21	30†	13	24	-10	10
ld	5	31	-10	2	10	5	30	9	34	5	48	15	59	16	53	30	46	11	19	30	20	24	-9	8
ast Plain.																								
	3	22	-12	2	2	5	24	9	32	1	44	15	53	2	48	29	42	30	15	30	14	24	-9	8†
City	6	16†	-10	2	7	5	26	9	33	1	45	15	56	17	54	10	44	30	18	30	17	24	-8	8
	6	14	-10	2	4	5	21	9	34	5	45	14†	55	3	51	30	42	30	19	30	15	24	-10	10
ville	5	22†	-11	1	-3	5	25	9	33	1	45	15	55	3	50	29†	42	30	17	30	14	24	-12	10
	-3	14	-8	2	11	4	25	9	33	1	45	15	58	16†	49	30	41	30	16	30	16	24	-12	9
	2	16	-12	2	-7	5	23	9	32	1†	44	16	50	3	46	30	35	22	20	30	10	24	-17	10
	3	22	-13	2	-3	5	25	9	35	1†	42	16	52	4	50	26†	40	30	19	13†	14	24	-13	10
	7	22	-9	2	10	5	25	9	33	1	44	15	56	3	49	30	43	30	18	30	16	24	-9	8
burg	4	16	-12	2	5	5	27	9	36	1†	44	15	54	15	52	10†	42	11	19	30	19	24	-10	8
	2	14	-12	2	0	5	23	9	30	5†	38	15	50	4	46	30	37	22†	17	24	8	24	-19	10
ast Plateau.																								
	0	22	-15	2	4	5	26	9	35	5	52	16	59	16	51	10	43	11	17	30	21	19	-12	29
	-8	14	-19	2	-5	5	19	9	32	5†	40	15	48	3	45	16†	39	27	15	30	9	24	-17	29
ie	...	...	...	...	...	...	...	...	...	...	46	15†	50	3	57	16†	38	30	16	30	20	29	...	...
on	-6	14†	-21	2	0	4	24	8†	33	1†	50	16	53	3	51	28	40	27	16	30	19	29	-18	29
y	-5	14†	-20	2	1	4†	21	8	33	4	46	15	52	3	50	29	42	27	15	30	16	24†	-17	29
ty	-3	31	-12	2	8	4	30	8	37	5	52	16	60	17	55	29	46	27	21	30	24	21	-9	29
	0	22	-17	2	4	4	28	2†	31	1†	45	15	54	17	52	25†	42	27	18	30	20	29	-13	29
n	1	16†	-13	2	4	5	25	9	35	5†	46	15	55	3	50	29	42	11	21	30	25	2†	-10	8†
	2	22	...	...	...	...	26	9	34	5	45	16	53	3	52	25†	43	11†	18	30	18	24	...	...
	-7	23	-21	2†	0	3†	24	8	32	1†	42	15†	51	3	48	10	38	27†	12	30†	15	24	-18	30
	-5	22	-18	2	3	4	26	8†	32	1†	45	15	54	3	49	10	37	27	15	30	17	24	-16	29
a	8	31	-16	2	7	4	29	8	35	5	49	15	56	3	51	29	44	27	20	30	17	24	-13	29
	-5	22	-19	2	4	4†	23	8	31	5	43	15	52	3	46	29	38	27	14	30	14	24	-16	29
	0	22	-17	2	4	4	26	9	34	5	46	15	55	3	50	29	44	22†	18	30	16	24	-14	29

Monthly and Annual Precipitation of Each Section for the Year 1917, with Departures from the Normal.

ations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
t Plain	1.19	-0.79	0.25	-2.02	2.93	+0.42	5.61	+2.06	4.46	-0.15	3.50	-0.91	2.12	-1.96	2.95	-0.19	2.92	-1.02	1.22	-1.23	0.22	-1.98	0.52	-1.38	28.05	-9.50
Lowlands	3.58	+0.22	1.71	-1.70	3.19	+1.45	7.62	+3.53	2.49	-1.70	4.56	-0.20	4.90	+0.90	5.78	+3.35	0.69	-2.53	1.53	-1.39	2.56	-0.95	1.25	-2.10	40.60	-2.55
ateau	2.20	-0.21	0.37	-2.34	2.39	+1.29	6.29	+2.01	4.08	-0.21	3.11	-1.42	4.61	+0.47	5.79	+1.85	2.97	-0.90	0.98	-1.88	2.72	-0.60	1.19	-1.34	37.45	-6.26
t Plain	0.70	-1.11	0.12	-2.22	3.24	+0.57	4.86	+1.06	5.24	0.63	1.17	-3.71	2.65	-1.78	4.90	+1.21	3.75	-0.42	0.94	-1.68	0.28	-1.71	0.56	-1.34	28.79	10.59
t Plateau	0.53	-0.76	0.68	-1.64	1.89	-0.36	5.81	+2.90	4.08	-1.28	7.60	+3.09	1.25	-3.44	3.55	-0.27	3.07	-1.07	1.33	-1.26	0.06	-1.55	0.32	-1.10	29.32	-6.81
	1.52	-0.64	0.41	-2.03	2.91	-0.42	5.97	+2.02	4.33	-0.47	3.78	-0.59	2.96	-1.22	4.45	+0.94	2.78	-1.09	1.16	-1.49	1.05	-1.46	0.74	-1.40	31.94	-7.67

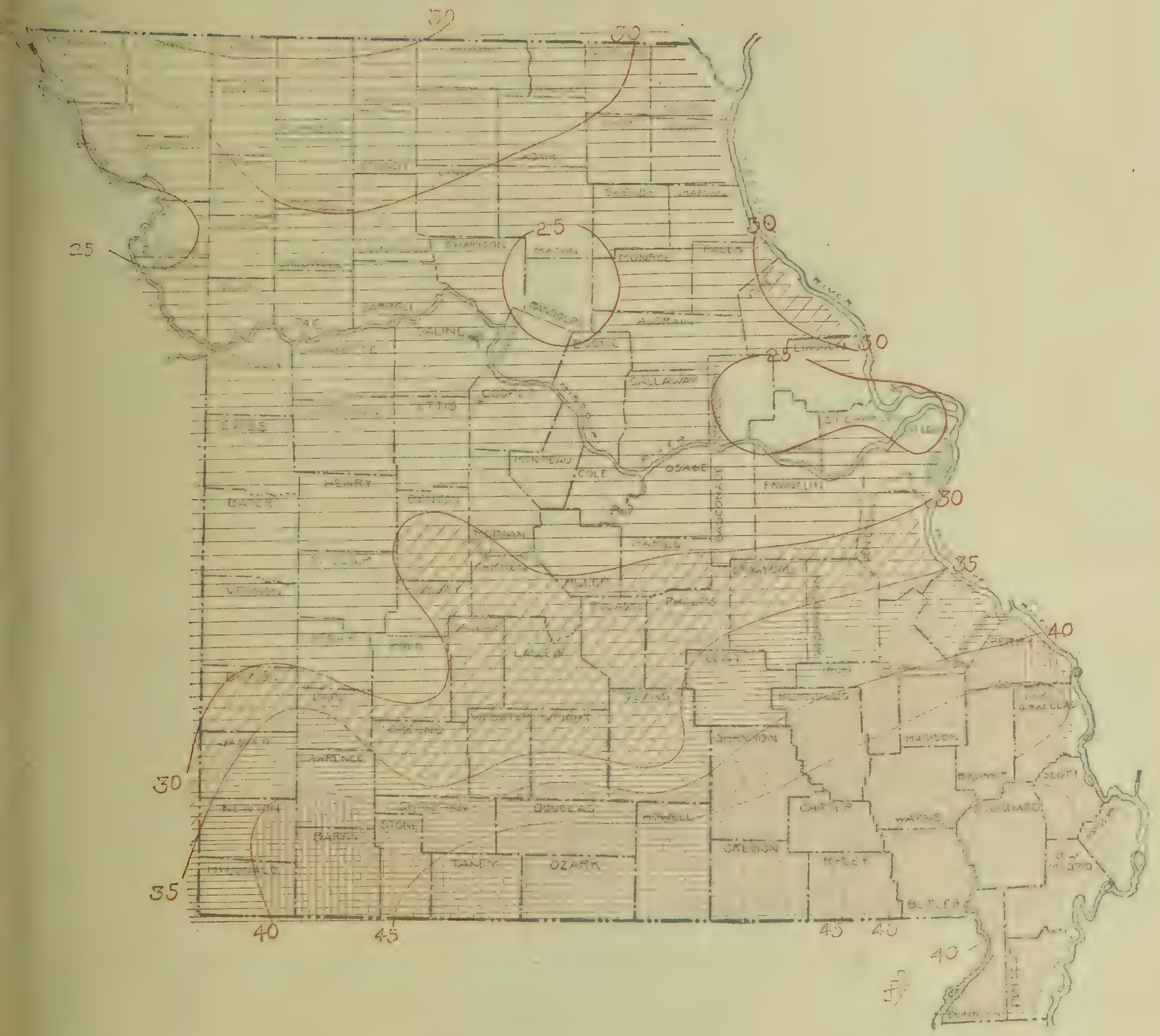
OBSERVATION STATIONS.



CO-OPERATIVE OBSERVERS.

Stations.	Name.	Stations.	Name.	Stations.	Name.
Amoret	Darby Fruit Farm.	Gorin	J. W. Pulliam.	Neosho	W. O. Puck.
Appleton City	W. G. Bigelow.	Grant City	W. H. Campbell.	Nevada	Mrs. C. Jewell.
Arlington	Wm. R. Bennett.	Hannibal	U. S. Weather Bureau	New Madrid	Miss Josie Smith.
Avalon	F. G. Ashbaugh.	Harrisonville	A. J. Sharp.	Oakfield	E. E. Steines.
Bethany	M. H. Moulton.	Hermann	C. T. Maushund.	Oregon	Tom Curry.
Birchtree	V. H. Kirkendall.	Hollister	W. P. Chapmann.	Osceola	Wm. E. Matthews.
Bolivar	A. C. Fink,	Houston	R. F. Harmon.	Pacific	R. C. Dougherty.
Boonville	C. Randecker.	Ironton	W. H. Delano.	Palmyra	W. B. Markell.
Brunswick	Louis Benecke.	Jackson	L. M. [illegible]	Patton (near)	George F. Ellis
Cape Girardeau	D. L. Albert	Jefferson City	Miss Emma Swift.	Poplar Bluff	Miss Belle Kinne.
Caruthersville	H. E. Averill	Kansas City	U. S. Weather Bureau.	Rolla	Prof. Elmo G. Herris
Cassville	William Talbert.	Keytesville	J. T. Dewey, M. D.	St. Catherine	L. D. Baker.
Clifton Hill	L. S. Harlan.	Kidder	J. F. Sharp.	St. Charles	L. C. Saeger.
Chillicothe	Dr. J. R. Campbell.	Kirksville	Prof. Mark Burrows.	St. Joseph	U. S. Weather Burea
Clinton	A. E. Derwent, M. D.	Koshkonong	R. M. Hitt	St. Louis(1)	U. S. Weather Burea
Columbia	U. S. Weather Bureau.	Lamar	Joe W. Springer.	St. Louis(2)	St. Louis University.
Conception	Fr. Adelhelm Hess	Lamonte	J. Ed. Hall.	Springfield	U. S. Weather Burea
Crocker	Roy W. Reed	Lebanon	Leonard E. Dickerson.	Steelville	Wm. J. Drenner.
Dean	H. E. Dean	Lexington	J. W. Keithley.	Steffenville	Frank Hall.
Doniphan	W. W. Martin.	Liberty	W. C. Wilmott.	Tarkio	John F. Frazier.
Eldon	E. H. Shepherd.	Lockwood	C. S. Crow	Trenton	W. H. Estes
Fayette	Prof. T. B. Smith.	Louisiana	J. T. Farrell.	Tuscumbia	C. B. Wright.
Fruit City	R. C. Walton.	Macon	John A. Cook.	Union	J. Wm. Keller.
Fulton	Dr. O. M. Weagle.	Marble Hill	Dr. A. F. Hendricks	Unionville	Geo. W. Davis.
Gallatin	Robert R. [illegible], Jr.	Marshall	Prof. W. H. Black.	Valley Park	H. J. Lucksinger.
Gano	A. C. [illegible]	Maryville	J. R. Brink.	Warrenton	Prof. J. H. Frick.
Glasgow	Vant R. [illegible]	Mexico	R. M. Llewellyn.	Warrensburg	George H. Collins.
Goodland	F. M. Adams.	Mountain Grove	Missouri Fruit Exp. Station.	Warsaw	J. R. Smith, M. D.
		Mount Vernon	C. L. White.	Waverly	John W. Cauthorn.

TOTAL PRECIPITATION FOR YEAR 191~~6~~7.



SCALE OF SHADES—Inches.

☐	☰	▨	▤	▦
Less than 25	25 to 30	30 to 35.	35 to 40.	More than 40.

Recapitulation of Tornadoes in Missouri from May 21st to June 12th, 1917, Giving Some Principal Facts in Comparative Form.

TOWN.	COUNTY.	Key No. shown on Tornado-Path Chart.	Date of Occurrence of Storm.	Direction From.	Time of Occurrence of Storm	Diameter of Path in Feet.	No. of Persons Killed.	Number of Persons Injured (Seriously).	Estimated Amount of Damage to Buildings, Live Stock, Implements, etc., but not Crops.
			May						
Arno	Douglass	1	21	sw.	2.00p	....	0	0	$ 1,000
Mansfield	Wright	1	21	sw.	2.30p	300	0	2	20,000
Niangua	Webster	2	21	sw.	2.30p	300	0	0	400
Coldspring	Douglass	3	21	sw.	1.00p	900	0	4	5,000
Chadwick	Christian	4	27	sw.	11.50a	175	0	1	2,000
Bruner	Christian	4	27	sw.	12.30p	2000	0	3	7,000
Elkhead	Christian	4	27	sw.	12.50p	1000	0	2	2,000
Sarvis Point	Webster	4	27	sw.	......	500	1	1	500
Seymour	Webster	4	27	sw.	1.30p	600	0	10	10,000
Hartville (near)	Wright	4	27	sw.	2.00p	75	0	0	1,000
Boaz	Christian	5	27	w.	11.45a	100	0	0	1,200
Nixa (vicinity)	Christian	5	27	sw.	12.10p	....	0	1	800
Fordland (near)	Webster	5	27	sw.	12.30p	150	0	4	1,800
Hurley	Stone	6	27	sw.	12.15p	1300	0	15	10,000
Bruner (Blue Ridge)	Christian	6	27	sw.	......	....	0	4	1,000
Montague	Christian	7	27	sw.	1.00p	600	1	1	500
St. Marys	Ste Genevieve	8	27	sw.	4.30p	1000	0	15	2,500
Granby	Newton		27	......	12. M	....	1	1	2,000
Manes	Wright	9	30	sw.	1.00p	1800	0	5	20,000
Lenox	Dent	9	30	sw.	1.50p	1400	2	4	8,000
Anutt	Dent	9	30	sw.	2.00p	600	1	7	5,500
Eye	Washington	9	30	sw.	3.18p	2000	1	1	4,000
Mineral Point	Washington	9	30	sw.	3.28p	2500	4	52	300,000
Valles Mines	Jefferson	9	30	sw.	3.45p	750	0	8	35,000
Hazelton	Texas	10	30	sw.	1.30p	1200	4	2	8,000
Maples	Texas	10	30	sw.	2.00p	1200	0	2	3,500
Success	Texas	11	30	sw.	1.50p	3600	2	1	1,500
Licking	Texas	11	30	sw.	2.10p	1500	0	8	15,000
Coulstone	Texas	11	30	sw.	2.20p	1500	0	2	3,000
Ranger	Dent	11	30	sw.	2.30p	2000	0	3	2,000
Salem	Dent	11	30	sw.	2.40p	1500	0	5	12,000
Flat River	St. Francois	12	30	sw.	4.30p	120	0	3	10,000
Elvins	St. Francois	12	30	sw.	4.30p	120	1	4	15,000
Bismarck	St. Francois	13	30	sw.	4.45p	300	1	6	10,000
Monterey	Reynolds	14	30	sw.	4.30p	1000	0	1	1,000
Munger	Reynolds	14	30	sw.	4 45p	1500	4	11	4,000
Graniteville	Iron	14	30	sw.	5.00p	300	1	0	6,000
Fredericktown	Madison	15	30	sw.	5.30p	400	3	0	25,000
Chaonia	Wayne	16	30	sw.	6.00p	2000	8	1	4,500
Zalma	Rollinger	16	30	sw.	6.15p	3000	9	130	200,000
Dongola	Rollinger	16	30	sw.	6.20p	5000	7	43	120,000
Drum	Rollinger	16	30	sw.	6.25p	3500	0	15	40,000
Zeta	Stoddard	17	30	sw.	7.00p	1200	3	5	2,500
Ardeola	Stoddard	17	30	sw.	7.07p	600	3	20	10,000
Oran	Scott	17	30	sw.	7.30p	1500	0	0	9,000
Oran	Scott	18	30	sw.	8.15p	300	0	0	1,000
Crowder	Scott	19	30	sw.	8.00p	1500	0	10	20,000
Morley (near)	Scott	19	30	sw.	8.45p	300	0	12	10,000
Morley (near)	Scott	20	30	sw.	6.30p	200	0	3	1,000
Scott County—all other	storms	....	30	sw.	......	....	....	....	150,000
Hornersville	Dunklin	21	30	sw.	......	300	1	1	2,000
Etlah	Franklin	22	30	w.	2.00p	....	0	2	2,000
			June						
Clarks Fork	Cooper	23	5	sw.	8.30p	1200	0	0	30,000
Overton	Cooper	23	5	sw.	9.00p	1500	4	12	25,000
Rocheport	Boone	23	5	sw.	9.15p	1500	2	9	35,000
Midway	Boone	23	5	sw.	9.30p	1200	3	4	35,000
New Providence	Boone	23	5	sw.	9.40p	1000	1	14	45,000
Hinton	Boone	23	5	sw.	9.50p	600	3	9	45,000
Hallsville (near)	Boone	23	5	sw.	9.55p	300	0	12	45,000
Centralia	Boone	23	5	sw.	10.10p	300	7	8	50,000
Richmond	Ray	24	5	sw.	8.00p	300	4	2	5,000
Stet	Carroll	24	5	sw.	8.27p	250	0	2	20,000
Snyder (Dean Lake)	Chariton	25	5	sw.	8.45p	200	0	3	10,000
Whitham	Chariton	25	5	sw.	9.00p	250	1	7	15,000
Melzo	Jefferson	26	5	sw.	4.00p	600	0	0	800
Princeton	Mercer	27	12	sw.	6 30p	1500	2	6	40,000
					Totals	....	83	519	$1,530,000

KILLING FROSTS, 1917.

Stations.	Last in spring.	First in Autumn.	Days in Growing Season.
Northeast Plain.			
Brunswick	April 15	Oct. 8	175
Clifton Hill	April 15	Oct 6	173
Columbia	April 9	Oct. 6	179
Fayette	April 9	Oct. 8	181
Fulton	April 15	Oct. 6	173
Hannibal	April 14	Oct. 8	176
Jefferson City	April 10	Oct. 9	181
Kirksville	April 15	Oct. 6	173
Louisiana	April 15	Oct. 1	168
Macon	April 15	Oct. 6	173
Mexico	April 14	Oct. 6	174
Oakfield	April 9	Oct. 9	182
Palmyra	April 16	Oct. 6	174
St. Catherine	April 26	Oct. 6	163
St. Charles	April 14	Oct. 9	177
St. Louis (1)	April 9	Oct. 12	185
St. Louis (2)	April 13	Oct. 12	181
Steffenville	April 15	Oct. 6	173
Unionville	April 26	Oct. 6	162
Warrenton	April 14	Oct. 8	176
Keokuk, Iowa	April 15	Oct. 8	175
Southeast Lowlands			
Caruthersville	March 6	Oct. 9	216
Doniphan	April 10	Oct. 9	181
Jackson	April 14	Oct. 1	169
Marble Hill	April 10	Oct. 9	181
Poplar Bluff	April 15	Oct. 8	175
Sikeston	April 14	......	...
Cairo, Ill.	March 6	Oct. 13	219
Ozark Plateau.			
Birchtree	April 14	Oct. 9	177
Bolivar	April 9	Oct. 6	179
Cassville	April 14	......	...
Crocker	April 8	Oct. 6	180
Dean	April 9	Oct. 9	182
Eldon	April 26	Oct. 6	162
Fruit City	April 9	Oct. 11	183

Stations.	Last in Spring.
Ozark Plateau (continued)	
Gano	April 14
Goodland	April 15
Hollister	April 9
Houston	April 14
Ironton	April 15
Koshkonong	April 9
Lebanon	April 16
Lockwood	April 9
Mountain Grove	April 14
Neosho	April 9
Rolla	April 14
Springfield	April 9
Southwest Plain.	
Amoret	April 9
Appleton City	April 9
Clinton	April 9
Harrisonville	April 19
Lamar	April 9
Lamonte	April 26
Marshall	April 26
Nevada	April 9
Warrensburg	April 9
Warsaw	April 15
Northwest Plateau.	
Avalon	April 9
Bethany	April 26
Chillicothe	......
Conception	April 26
Grant City	April 26
Kansas City	April 9
Kidder	April 13
Lexington	April 9
Liberty	April 13
Maryville	April 26
Oregon	April 26
St. Joseph	April 9
Tarkio	April 26
Trenton	April 9

05
MS

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

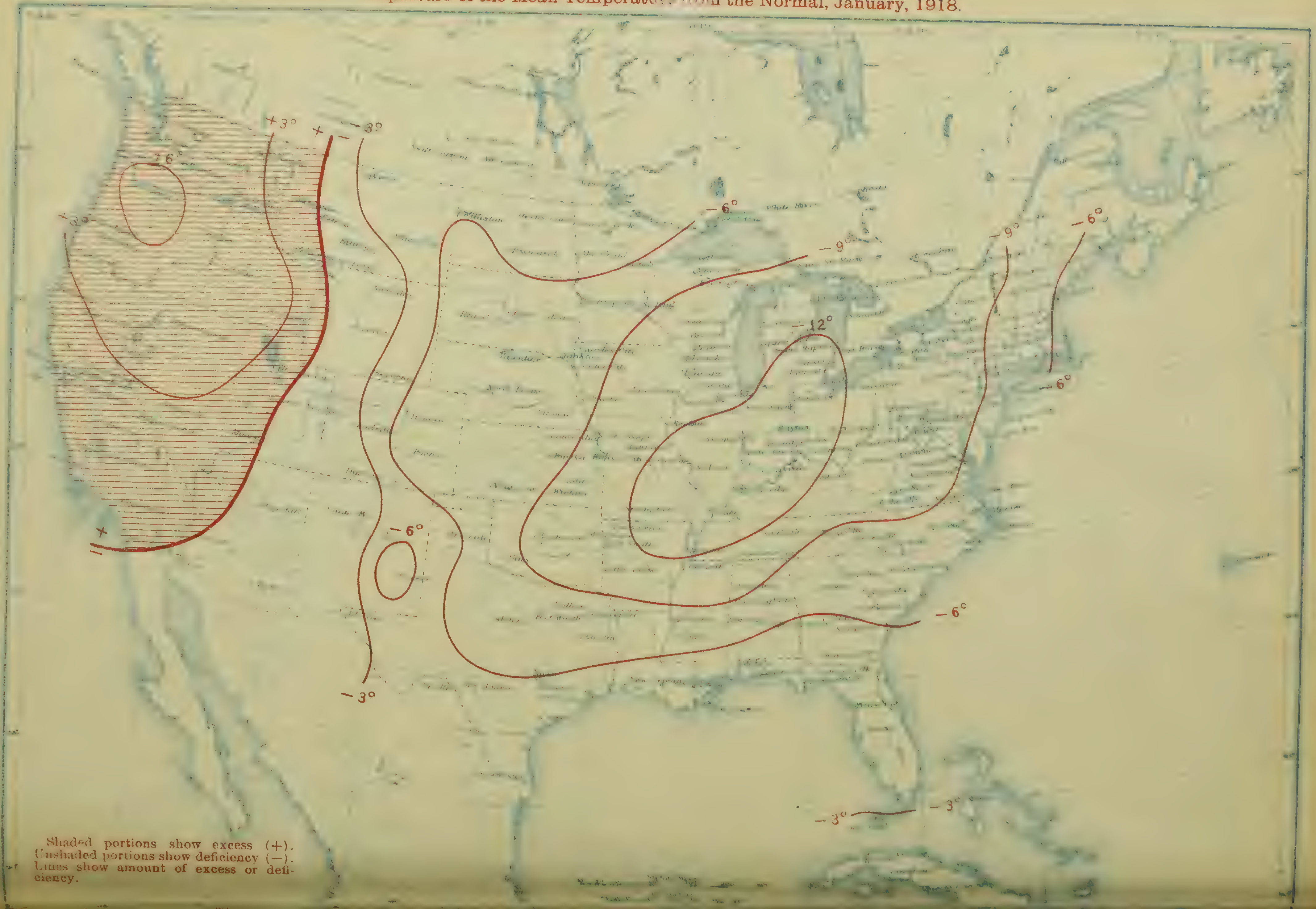
JANUARY, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
FEBRUARY 26, 1918.

Departure of the Mean Temperature from the Normal, January, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XII. COLUMBIA, MO., JANUARY, 1918. No. 1.

GENERAL SUMMARY.

ry, 1918, in Missouri, was the coldest month on record.
v on the ground for about 26 days, a longer period than
in parts of the Ozark Plateau snow remained on the
ontinuously the entire month. Though the snowfall
y January was the fifth consecutive month with de-
recipitation. The first two or three days were compar-
ild; but with the 5th and 6th was ushered in one of
remarkable cold and snow periods that has occured
e past thirty years.

ow drifted to several feet deep in places, railroad cuts
d, highways made impassable, and most business and
re demoralized for about a week or ten days, and were
less abnormal during most of the month because of the
ld.

e of the great scarcity of water on the farms very little
oused.

ion of wheat and rye before they were covered was fair,
ondition at the close of the month was unknown, be-
snow covering. Peach buds, much weakened by the
eratures in December, were nearly all killed in Janu-
here was much complaint of a scarcity of stock water,
was fairly plentiful.

TEMPERATURE.

onthly mean temperature for the state, 67 stations re-
was 16.4°. The mean departure from the normal for
s having 10 or more years' record was minus 14.0°.
he greatest deficiency ever recorded in January, the
ing 3.7° colder than in 1912, the previous low record.
was uniformly distributed throughout the State, the
ure deficiency, however, being about 4.6° greater in the
ern lowlands than it was in the northwestern plateau.
an average of 24 days on which the maximum temp-
id not rise above 32°; there were 9 days with minimum
of 0° or lower, and at 22 stations the temperature did
bove 0° on the 12th. At Columbia, the section cen-
e continuous automatic records are taken, the temper-
0° or lower continuously from 4 a. m of the 11th to
of the 13th, or 52 hours, equaling a similar record in
1912. The minimum for the month was −24°; this
been equaled three times and exceeded four times in
Januarys, beginning in 1888.

PRECIPITATION.

erage monthly precipitation, 82 stations reporting, was 1.68
The departure from the normal for 72 stations having 10 or
s record was minus 0.71 inch. Precipitation was frequent al-
ficient in all divisions. It was the fifth consecutive month of
precipitation, although the snowfall was the heaviest in years
ate as a whole, both in depth and in duration. The average for
was 16.6 inches. Over 30 inches fell in the Southeast Lowlands,
in the Ozark Plateau, and somewhat smaller totals in the other
sions. At Koshkonong and Hollister, stations along the imme-
hern border, more than 45 inches fell. The snowfall of the
onth, while markedly unusual, was equaled in February, 1900,
ded in March, 1912, when 17.5 inches fell. Along the southern
he Ozark Plateau and in the Southeast Lowlands it is probably
est snow that has fallen in thirty years.

WIND.

The prevailing winds were from the northwest. The total number of miles and hourly velocities, as recorded at 8 stations equipped with anemometers, was 8,019 and 10.8, respectively, or slightly above the normals. Fresh to strong west to northerly winds prevailed on the 1st, 2d, 11th, and 12th.

SUNSHINE AND CLOUDINESS.

For a month of frequent snows, the weather was quite bright. The average number of hours of sunshine, 5 regular stations reporting, was 173, or about 55 per cent of the possible and 4 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs---On the 5th. Halos, solar---4th, 5th, 9th, 12th, 13th, 14th, 15th, 21st, 23d, 24th, and 25th. Halos, lunar---1st, 4th, 5th, 19th, 22d, 24th, 25th, and 26th. Sleet---1st, 6th, 13th, and 14th.

ERRATA FOR DECEMBER, 1917.

Lexington, mean minimum temperature, page 94, should be 15.0; mean monthly, page 92, should be 22.8. Oakfield, total snowfall, page 92, should be 7.8 inches. Bolivar, page 92, mean temperature, 26.0. Clinton, page 92, mean temperature, 26.8. Ironton, page 94, mean maximum should be 35.9.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.22	83	......	182	60	6,905	9.3	34	nw.	2
Hannibal	30.00	82	......	......	......	7,659	10.3	40	sw.	12
Kansas City	30.03	78	68	172	57	9,688	13.0	44	nw.	2
St. Joseph	30.04	88	73	166	55	7,305	9.8	36	nw.	1
St. Louis	29.99	85	74	143	47	10,336	13.9	46	w.	11
Springfield	30.02	92	78	189	61	8,043	10.8	32	n.	2
Cairo, Ill	29.99	73	76	......	......	7,514	10.1	43	w.	2
Keokuk, Iowa	30.02	81	78	157	52	6,701	9.0	35	n.	12

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	21.5	−8.7	74	−32	1.91	−0.08	......	......	6	....	....	....
1889	31.8	+1.6	69	−2	2.36	+0.37	......	......	6	....	....	....
1890	33.8	+3.6	81	−19	4.25	+2.26	......	......	9	....	....	....
1891	34.1	+3.9	74	−1	1.52	−0.47	......	4.3	6	....	....	....
1892	24.0	−6.2	67	−25	1.80	−0.19	......	......	4	14	8	9
1893	22.5	−7.7	66	−14	0.45	−1.54	0.90	2.4	3	9	11	11
1894	31.4	+1.2	77	−35	2.21	−0.22	2.96	2.7	5	13	9	9
1895	24.7	−5.5	78	−22	1.49	−0.50	2.20	9.4	5	14	8	9
1896	32.9	+2.7	71	−9	1.17	−0.82	2.44	3.1	4	10	7	14
1897	28.4	−1.8	72	−16	4.90	+2.91	6.95	4.0	8	12	7	12
1898	34.3	+4.1	75	−10	3.98	+1.99	3.35	8.4	9	11	8	12
1899	30.2	0.0	70	−21	1.55	−0.44	2.40	4.0	6	12	8	11
1900	34.5	+4.3	77	−9	1.22	−0.77	2.30	0.2	4	14	7	10
1901	35.0	+4.8	72	−11	1.30	−0.69	2.95	0.8	4	17	7	7
1902	30.1	−0.1	72	−17	1.23	−0.76	3.37	6.9	5	16	7	8
1903	31.4	+1.2	73	−11	1.36	−0.63	1.71	5.0	6	13	6	12
1904	27.0	−3.2	66	−23	2.85	+0.86	4.74	7.4	8	14	6	11
1905	22.3	−7.9	72	−19	1.79	−0.20	2.52	6.8	8	14	6	11
1906	35.6	+5.4	76	−8	3.64	+1.65	3.00	9.2	6	14	5	12
1907	34.3	+4.1	79	−5	5.10	+3.11	4.42	2.8	12	7	6	18
1908	34.4	+4.2	68	−10	1.51	0.48	2.13	3.6	5	19	5	7
1909	33.7	+3.5	83	−20	2.17	+0.18	2.10	6.5	7	6	7	18
1910	32.3	+2.1	78	−24	1.83	−0.16	3.98	3.5	5	13	6	12
1911	34.6	+4.4	78	−19	1.20	−0.70	3.03	0.7	5	8	7	16
1912	20.0	−11.3	70	−36	1.06	−1.20	2.56	6.5	4	14	7	10
1913	33.1	+1.8	74	−12	3.67	+1.30	5.30	2.6	8	13	6	12
1914	38.1	+6.9	78	−1	1.42	−0.92	2.00	1.0	4	12	7	12
1915	29.1	−2.2	76	−24	2.92	+0.59	3.10	5.4	8	12	5	14
1916	31.6	+0.7	72	−24	7.36	+5.16	4.65	3.4	12	9	4	18
1917	32.9	+2.5	76	−10	1.52	−0.64	2.50	2.3	5	15	7	9
1918	16.4	−14.0	67	−24	1.68	−0.71	3.20	16.6	7	12	7	12

Climatological data for January, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observ
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	37	13.0	13.8	46	1	−20	12†	34	0.94	−0.83	0.26	24.7	8	18	0	13	nw.	Louis Berecke
Clifton Hill	Randolph	731	....	14.8	14.1	43	2	−21	12	33	1.75	−0.26	0.60	17.5	10	12	8	11	.....	L. S. Harlan.
Columbia	Boone	784	27	15.1	11.5	44	1	−19	12	35	1.00	−1.23	0.38	11.6	7	6	11	14	sw.	U. S. Weather
Fayette	Howard	725	52	11.7	−15.7	[illegible]	1	−23	12	37	2.25	+0.14	0.85	19.0	6	....	....	..	......	Prof. T. B. S
Fulton	Callaway	818	13	14.8	−15.1	[illegible]	1	−22	12	45	1.30	−1.31	0.70	16.0	10	15	10	6	nw.	Dr. O. M. We
Gorin	Scotland	700	28	......	......	....	...	......	....	....	0.50	−1.26	0.23	5.0	4	3	10	18	nw.	J. W. [illegible]
Hannibal	Marion	531	21	13.6	13.1	52	1	−20	12	37	0.98	−1.22	0.28	15.8	8	7	7	17	sw.	U. S. Weather
Jefferson City	Cole	557	31	15.4	−14.8	47	25	−20	12	31	0.88	−1.50	0.50	15.5	6	18	4	9	w.	Miss Emma S
Keytesville	Chariton	660	4	......	......	....	....	......	....	....	1.95	....	0.60	19.5	10	....	....	....	...	J. T. Dewey, M
Kirksville	Adair	969	25	13.5	−11.1	44	4	−22	12	32	0.89	−0.75	0.33	9.5	7	8	14	9	w.	Prof. Mark B
Louisiana	Pike	469	39	13.6	−14.3	43	6	−20	12	39	1.83	−0.22	0.90	19.0	7	12	7	12	w.	J. T. Farrell.
Macon	Macon	875	19	......	......	....	....	......	....	....	......	....	....	...	....	....	....	....	....	
Mexico	Audrain	797	39	14.0	−15.6	43	[illegible]	−22	12	44	1.25	−0.93	0.56	26.5	4	19	12	0	w.	R. M. Llewelly
Oakfield.‡‡	Franklin	793	36	18.4	−13.7	52	25	21	12	33	1.14	−1.43	0.48	11.0	5	7	14	10	nw.	E. L. Stevens.
Palmyra	Marion	652	5	10.4	−18.0	42	2	−22	12	38	1.31	−1.34	0.50	13.1	6	17	3	11	w.	W. B. Markell.
St. Catherine	Linn	850	4	15.3	....	43	4	−23	12	33	0.59	....	0.20	15.2	8	10	14	7	n.	L. D. Baker.
St. Charles	St. Charles	456	39	16.5	−11.7	47	25	−20	12	27	0.85	−1.65	0.50	7.0	3	9	8	14	n.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	46	18.8	−12.2	45	25	−17	12	29	1.31	−0.96	0.50	11.7	11	6	13	12	nw.	U. S. Weather
St. Louis (2)	do.	578	5	17.4	....	43	25	−18	12	30	1.69	....	0.39	14.5	10	7	10	14	w.	St. Louis Univ
Shelbina	Shelby	775	25	......	......	....	....	......	....	....	......	....	......	.	....	....	....	....	......	S. G. Parsons.
Steffenville	Lewis	676	21	12.1	16.3	44	4	−24	12	41	1.02	−1.45	0.50	13.0	4	9	16	6	w.	Frank Hall.
Unionville	Putnam	1,072	24	10.2	−13.1	45	4	−20[a]	12	33	1.36	−0.74	0.35	14.0	5	20	4	7	nw.	Geo. W. Davis.
Warrenton	Warren	865	26	13.6	−15.6	42	25	−21	12	34	1.20	−1.26	0.38	15.6	16	7	12	12	nw.	Prof. J. H. Fr
Keokuk, Iowa	Lee, Ia.	574	36	12.1	11.3	41	4	−21	12	33	0.70	−0.99	0.27	8.0	6	10	13	8	nw.	U. S. Weather
Section means and extremes		......	...	14.2	−14.1	52	25	−24	12	45	1.21	−1.01	0.90	14.7	7	11	10	10	nw.	
Southeast Lowlands.																				
Caruthersville	Pemiscott	220	26	21.8	−14.5	60	25	−15	12	37	7.18	+2.60	3.20	23.0	9	11	5	15	e.	H. E. Averill.
Doniphan	Ripley	311	12	20.7	−16.4	53	26	−16	13	40	6.15	+1.79	1.20	36.0	10	18	2	11	nw	W. W. Martin.
Jackson	Cape Girardeau	458	26	15.9	−18.4	57	26	−18	12†	41	2.51	−1.40	1.07	35.7	10	7	7	17	n.	L. M. Bean.
Marble Hill	Bollinger	420	25	20.7	11.0	69	25	−17	12	46	1.28	−2.50	0.60	38.0	8	13	2	16	nw.	Dr. A. F. Hend
Patton (near)	Bollinger	560	2	......	......	....	....	......	....	....	1.50	....	0.70	15.0	4	..	....	....	....	George F. Ells
Poplar Bluff	Butler	339	13	19.2	−17.9	59	26	−18	12	40	4.75	+0.67	1.50	47.5	9	11[b]	8[a]	11[a]	......	Miss Belle Kin
Cairo, Ill.	Alexander, Ill	359	14	21.0	−13.8	53	25	−16	12	27	3.47	−0.35	0.94	24.2	12	9	7	15	n.	U. S. Weather
Section means and extremes		......	......	20.3	−16.2	60	25	−18	12	41	4.26	−0.66	3.20	30.2	9	11	6	14	n.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	23	19.0	−15.8	60	26	−19	12	35	3.33	+0.22	1.30	23.0	6	20	1	10	n.	V. H. Kirkenda
Bolivar	Polk	1,071	29	17.2	−17.4	47	25	−20	12	39	1.10	−0.89	......	11.0	....	16	6	9	sw.	A. C. Fink.
Cassville	Barry	1,500	6	20.4	......	63	26	−18	12	50	1.96	−0.31	0.69	15.9	7	17	0	14	n.	William Talber
Crocker	Pulaski	1,126	6	22.5	− 8.6	67	29	−21	12	67	1.70	−0.74	1.00	17.0	3	17	1	13	se.	Roy W. Reed.
Dean‡‡	McDonald	1,000	18	19.5[a]	−17.4	62	26	−24	12	46	2.60	+0.19	0.80	25.0	9	11	5'	10	..	H. E. Dean.
Eldon	Miller	934	16	16.1	−16.1	48	4	−22	12	36	1.06	−0.67	0.43	19.2	5	11	10	10	nw.	E. H. Shepherd
Fruit City	Reynolds	1,150	4	21.0	....	61	26	−19	12	33	1.75	−1.67	0.40	20.0	8	16	7	8	n.	R. C. Walton.
Gano‡‡	Dent	1,250	13	17.8	−16.2	53	25	−22	12	31	2.51	−0.58	0.45	17.9	12	11	9	11	nw.	A. C. Leach.
Goodland	Iron	1,000	12	19.9	−13.0	58	25	−20	12	45	1.74	−1.32	0.65	17.5	9	12	10	9	n.	F. M. Adams.
Hollister	Taney	735	8	22.6	−13.7	52	4	−14	12	52	4.00	+1.24	0.80	45.0	11	13	0	18	nw.	W. P. Chapma
Houston	Texas	1,280	24	20.0	−12.6	60	26	−19	12	41	2.30	−0.39	0.50	17.5	11	15	5	11	nw.	R. F. Hannon.
Ironton	Iron	925	39	17.0	−15.3	55	25†	−20	12	56	2.80	−0.46	0.65	20.7	10	5	14	12	nw.	W. H. Delano.
Koshkonong	Oregon	958	16	21.2	−15.8	60	25	−17	12	33	4.79	+1.19	1.20	42.0	10	9	10	12	nw.	R. M. Hitt.
Lebanon	Laclede	1,265	28	15.2	−18.4	48	4†	−21	12	35	1.48	−1.14	0.44	20.0	7	17	5	9	s.	Leonard E. Dick
Lockwood	Dade	1,078	22	19.4	−14.7	50	4	−19	12	30	0.77	−1.04	0.33	13.5	7	18	9	4	nw.	C. S. Crow.
Mountain Grove	Wright	1,490	18	17.8	−16.2	60	26	−19	12	37	1.87	−1.11	0.40	14.0	9	12	4	15	nw.	Mo. Fruit Exp.
Mount Vernon‡‡	Lawrence	1,180	28	18.4	−15.5	54	26	−18	12	36	0.96	−1.47	0.25	15.0	7	15	7	9	nw.	C. L. White.
Neosho	Newton	1,011	34	21.2	−14.2	62	26	−19	12	41	3.06	+0.44	1.00	24.5	11	15	4	12	nw.	W. O. Buck.
Rolla	Phelps	1,139	35	17.0	−14.5	53	25	−21	12	37	1.33	−1.27	0.40	18.0	8	8	16	6	nw.	Prof. [illegible] G. H
Springfield	Greene	1,350	29	18.4	−12.9	55	26	−19	12	38	1.96	−0.70	0.69	23.0	11	19	3	9	w.	U. S. Weather B
Section means and extremes		....	....	19.8	14.9	67	29	−24	12	67	2.15	−0.52	1.30	21.0	8	14	6	11	nw.	
Southwest Plain.																				
Amoret	Bates	831	8	17.9	−13.5	48	4	−23	12	40	0.91	−0.55	0.50	10.0	4	14	6	11	nw.	Darby Fruit Fa
Appleton City	St. Clair	833	26	18.5	−13.3	54	4	−21	12	38	1.27	−0.74	0.40	6.1	8	14	5	12	nw.	W. G. Bigelow.
Clinton	Henry	765	30	16.9	−14.8	49	4	−19	12	40	1.91	−0.18	0.90	20.0	7	6	15	10	nw.	A. E. Derwent,
Harrisonville	Cass	912	11	14.1	−13.3	50	1	−19	12	39	0.99	−0.70	0.30	9.7	6	10	2	19	w.	A. J. Sharp.
Lamar	Barton	980	36	19.2	12.5	51	4†	−21	12	37	0.80	−0.98	0.50	8.0	3	12	0	19	n.	Joe W. Springer
Lamonte	Pettis	863	28	14.2	−15.1	49	4	−21	12	43	0.22	−1.76	0.06	8.5	5	12	9	10	nw.	J. Ed. Hall.
Marshall	Saline	779	26	14.9	−12.8	45	4	−20	12	36	1.73	+0.25	0.40	17.0	10	10	9	12	nw.	Dr. W. H. Black.
Warrensburg	Johnson	883	28	17.1	−11.8	48	4	−20	12	35	0.66	−1.09	0.22	13.2	8	15	7	9	nw.	Geo. H. Collins.
Warsaw	Benton	715	12	17.2	−16.6	54	24	−22	12	53	1.95	−0.34	0.80	18.0	7	8	16	7	w.	J. R. Smith, M.
Section means and extremes		....	.	16.7	−13.9	54	4†	−23	12	53	1.16	−0.73	0.90	12.3	6	11	8	12	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	16.2	12.4	45	4	−22	12	34	1.55	−0.44	0.60	15.5	8	15	5	11	nw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	11.8	12.9	46	2	−22	12†	38	1.20	−0.25	0.40	12.0	5	10	12	9	nw.	M. H. Moulton.
Chillicothe	Livingston	768	1	10.9	19.6	48	4	−20	12	....	1.21	−0.87	0.50	11.1	7	13[a]	8[a]	9[a]	nw.	Dr. J. R. Campb
Conception	Nodaway	982	32	13.8	−11.0	52	24	−23	12	37	0.50	−0.55	0.35	5.0	4	10	17	4	nw	Fr. Adelhelm He
Gallatin	Daviess	803	17	..	......	......	......	......	......	....	1.65	+0.39	0.74	16.4	9	9	15	7	nw.	Robert R. Wynne
Grant City	Worth	1,131	21	13.6	11.0	52	24	−21	12	37	0.60	−0.42	0.30	6.0	2	15	4	12	nw.	W. H. Campbell.
Kansas City	Jackson	963	28	17.4	8.9	51	24	−16	11	35	0.94	−0.19	0.34	10.3	7	12	10	9	n.	U. S. Weather Bu
Kidder	Caldwell	1,020	20	11.6	−11.9	55	1	−21	12	38	0.69	−0.74	0.30	17.5	5	15	6	9	nw.	J. F. Sharp.
Lexington	Lafayette	688	35	16.6	10.9	47	4	−19	12	33	1.13	−0.53	0.37	11.0	4	19	0	12	n.	J. W. Keithley.
Liberty	Clay	861	28	.	......	......	......	......	......	....	......	....	......	...	....	....	....	....	...	W. C. Wilmott.
Maryville	Nodaway	1,036	26	10.8	11.1	54	21	−23	12	47	0.82	−0.37	0.30	8.2	6	15	8	8	nw.	J. R. Brink.
Oregon	Holt	1,048	6	13.8	−10.0	50	1	−21	12	38	0.58	−0.90	0.23	7.0	3	12	8	11	nw.	Tom Curry.
St. Joseph	Buchanan	967	15	15.6	......	52	24	−19	12	36	0.66	−0.45	0.45	6.1	7	9	9	13	nw.	U. S. Weather Bu
Tarkio	Atchison	976	5	11.6	7.4	55	24	−20	11	40	0.42	−0.44	0.20	4.2	3	16	7	8	nw.	John F. Frazier.
Trenton	Grundy	822	22	15.6	11.4	45	24	−20	12	31	1.09	−0.47	0.22	10.5	7	8	9	14	n.	W. H. Estes.
Section means and extremes		......	......	11.1	11.6	55	1†	−23	12	40	0.93	−0.45	0.74	10.1	6	13	8	10	nw.	
State means and extremes		......	...	16.1	11.0	67	29	−24	12	67	1.68	−0.71	3.20	16.6	7	12	7	12	nw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re
used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ‡ Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific
No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for January, 1918.

Stations.	Watersheds.	Day of month.																														Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
east Plain.																																	
	Missouri						.30	.18		.06		.06	T		.14			T											.25				0.99
vick	Grand						.26	.10	.02	.10	.14				.05													.02	.25				0.94
Hill	Chariton						.60	.10	.15	.05	.05	.30		.05	.15													10	.20				1.75
a***	Missouri		T.			T.	.04	.34	.04		.11	.12		.14			T.	T.		T.	T						T.	.21	T.			T.	1.00
	do						.85		.10		.10	.50			.40													.30					2.25
	do		T.			.02	.70	.01	.04		.04	.16		.08	.04													.20				.01	1.30
	Meramec																																......
	Mississippi						.14		.03		.10																	.23					0.50
al**	do	T.	T.				.27		.05	T.	.12	.16		.14	.04		T		T	T.	T.		T				T	19				.01	0.98
	Missouri	T.		T.			.14	.22		.08		.20	.06	T.	.07	.01	T						.01					T.	.29				1.08
ty‖	do						.17	.12		.02		.20			.07														.30				0.88
lle	Chariton					.10	.60	.10	.10	.10	.15	.15		.15															.40	.10			1.95
lle	Mississippi		T.			.09	.33	T.	05		.11	.03		T.			T.				T.	T.						.10	.18		T.		0.89
ta	do		T.				.15		.08	.03		.90			.50								T.					.05	.12			T.	1.83
	Chariton																																......
	Mississippi							.36				.15	.56																.18				1.25
	Meramec		T.			.22	.31		.03		T.	.48		T.	T							T						.10				T.	1.14
	do		T.				.43	.20		.12		.27	.01		.01	.01							.03						.26				1.34
ra	Mississippi						25			.10		.50			.15													T.	.30			.01	1.31
ume	Grand					T.	.20		.08	.04	.04	.08		T.	.03												T.	.02	.10				0.59
es	Missouri					T.	.50		T			.30																.05					0.85
s (1)**	Mississippi	T.	T.		.20	.37	.01	.08			.08	.16		.07	.04		T.	T.		T		.05					T.	.24	T.			.01	1.31
s (2)	do		T.			.24	.39		.10		.05	.29		.09	.13		T.			T.		.15						.24				.01	1.69
a	do																																......
ille	do	T.	T.			T.	.50				.07	.35		T.														.10		T.			1.02
	Meramec						.38	.24		.14		.17	.05		10		.01						.02					T.	.32				1.43
	Grand						.20	.35		.21		.20			T.								T.					T.	.40				1.36
ark	Meramec	T.	T.	T.			.30	.13		.11		.18	.08		.06	.04		T.	T.		T.		.04					T	.26				1.20
ton	Mississippi		T.	.01			.16	.38		.10		.23	.04		.10		.01		T				.02					T	.15				1.20
, Iowa***	do	T.	T.				.24		.01		06	.10		.02	T.		T.	T.			T.	T		T.			T.	.27				T.	0.70
st Lowlands.																																	
ardeau	Mississippi							.40		.30		.70	.40		.10	1.20	T				.10		.50						.30				4.00
sville	do		T.			T.	.90	T.	T.	.20	T.	1.25		T.	3.20		.26			.31		.17					.28	.61	T				7.18
an	Black					.25	.45		.50		.35	1.05		T.	.80					1.20		.30					T.	.95	.30				6.15
	Mississippi	1.07				05	.02		.40		.40			.05	.01					.01		.20						.30					2.51
Hill	do					.60			.20	.20		.08			.05	.09						.04						.02					1.28
chid	do	.02					1.00	.02		.22		.40	.04		.62	1.40	.04	.01			.18		.25					.24	1.05				5.49
near)	do								.20		30				.70								.30										1.50
Bluff	Black						.30	T.	T.	.33		.71	.24		.22	1.50					.10		.25						1.10				4.75
	Mississippi	T.	T.			.45	.14	T.	.26		41	.58		.06	.82		.02			.04		.25					.02	.42					3.47
Plateau.																																	
	Gasconade									T		.30	T.						T				T.						T.				0.30
	Black					.25	.25					.30				1.30						.30						.93					3.33
	Osage																																‡1.10
	White					T.	.13		T.		.66	.11			T.	T.	.12	T		.15		T						.69	.10				1.96
	Gasconade						T.	1.00				.60		T.			T.	T.										.10					1.70
	Neosho						.10			T.	.60	.80			.05		.10	.10		.60		.10					.15						2.60
	Osage						.26		.06		T.	.43		T.	.03			T.										.28				T.	1.06
ty	Black						.10					.45		.10	.25	.20	.20					.30						20					1.75
	Meramec					.30	.41	.12	.23	T.	T.	.35		.08	.34	.06	T.		.04			.08	.04					.45	T.				2.51
nd	Black						.20	.10	.12	.02		.40			.65							.10	.05						.10				1.74
	White							.10	.80	.60	.20		.80		.20					.30	.10	.20	.20					.20					4.00
	Gasconade		.10			.25	.20		.20		.05	.50			.40		.05	.10		T		20			.25								2.30
	Mississippi		.05	T.			.35	.05		.25		.25	.20		.05	.65		T.	T.	T	T	.35							.60				2.80
mong	Black					.59	.10		.40		.70	30			1.20		.20			.50		.40						.40					4.79
	Osage							.44		.11	.33			.15		.08							.15						.22				1.48
rd	do					T.	.12		.02		.11	.15	T.	T.	T.		.02					.02						.33					0.77
n Grove	White						.40	.12		.10		.22	.27	.09	.09		T.			T			.20						.38				1.87
on	Neosho					.20	.25				.23	.10			.06		T.			T.		.02						.10					0.96
	do					.15	.10	.05	.04		.60	1.00		T.	.05		.20			.10		.15						.62					3.06
	Meramec						.15	.20		.15		.30			.06	T.	T.	T	T	T.			.07						.40				1.33
ld***	White		T			.32	.10	T.	.04		.52	.17		.04	.13		.09	T.		.02		.05						.48	T.				1.96
	Meramec						.27																						.39				0.66
ba	Osage						.42	.12		.05		.15	.01		.05														.38				1.18
st Plain.																																	
	Osage		T.						.01		.30	.50						T.				T				T	T.	.10					0.91
City	do		T.			.10	.40	T.	.11	T.	.05	.35		.04	T.		01				T.								.21			T	1.27
	do		.35				.30		.15	.10		.90		.06															.05				1.91
nville	do					.18	.05			03			.30		.25						T							T	.18				0.99
	Neosho						.10				.50																		.20				0.80
	Missouri						.06		.05		.03			.06				T.	T.	T								.02					0.22
ll	do					.03	.40	.10	.05		.20	.30		.20	.20			T			T.			T				.15	.10				1.73
	Osage							48		.12																							0.60
sburg	Missouri		.01			.18	.08		.02		.14	.08		.05				T.		T								.10					0.66
y	Osage	T.	T.			.15	.65		.10	.05		.80		.10						T.		T						.10				T	1.95
	Missouri						.21	.08	T.	.02	T.	.28			.12											T			T	.27			0.98
rest Plateau.																																	
	Grand					.05		.60	.10		.10		.10														.10	.10	.40				1.55
y	do					T.	.10		T.		.30			T.				T		T							.10	.30	.40		T		1.20
the	do						.15	10	.05			35			.01													.05	.50				1.21
ton	Missouri						.05		.05		.35						T.	T.										.05			T.		0.50
	Grand		T.			.02	.30		.10		.20	T.		.02	T.		T.	.01		T.		T.					.01	.25	.74		T.	T.	1.65
ty	do	T.	T.	T.		T.		T.	T.	T.	.30	T	T.									T.						.30					0.60
City***	Missouri		T.			.08	.05		.02	T.	.27	.07		.12			T.	T.		T.		T.					T.	.33			T.	T.	0.94
	Grand							.06				.18		.05														.10	.30			T.	0.69
ton	Missouri						.37	.07				.29			.10														30				1.13
	do																																......
le	do						.05		T.	.02	.05	.30							T.									.20	.20		T.		0.82
	do	T.	T.			T.	T.		.05		.23			T.			T	T.		T.								.30			T		0.58
pi**	do		T.			.01	.01		.02		.15			.01			T.	T	T.	T.	T.	T					.01	.45	T.		T		0.66
	do					T.			T.		.20						T.	T.		T.							.02	.20					0.42
	Grand					.11	.18		.03		.12	.22		T.				T.		T.						T.	T.	.22	.21				1.09

cept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation. Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. ear Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate fall not recorded.

Daily temperatures for January, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	45	28	33	48	32	25	20	26	22	17	-2	-2	14	15	22	23	20	16	19	22	25	25	32	42	44	24	13	19	[illegible]	12
	Minimum	8	16	15	11	21	21	5	7	1	1	-7	-20	-20	-2	-10	4	8	-6	-2	1	-1	3	3	20	28	22	13	1	-1	-9
Columbia	Maximum	44	43	31	41	42	28	21	26	20	16	9	0	15	18	16	23	18	13	17	16	25	24	37	42	42	28	17	18	27	19
	Minimum	9	18	14	21	28	21	4	5	6	6	-17	-19	-5	4	7	12	6	-2	4	1	-1	4	7	30	28	15	11	8	[illegible]	1
Fayette	Maximum	42	42	30	44	40	23	17	25	19	13	2	-3	11	13	16	19	16	10	17	18	19	23	33	37	39	24	11	19	[illegible]	11
	Minimum	6	15	12	18	23	16	2	2	1	2	-20	-23	-10	0	-12	8	0	-7	2	0	9	3	0	23	23	11	8	0	1	8
Hannibal	Maximum	42	40	24	40	38	29	22	21	20	13	10	2	15	17	17	22	16	12	16	17	20	23	35	41	39	25	14	18	21	15
	Minimum	5	17	12	20	22	21	6	5	2	1	-20	-20	-5	6	8	9	3	-3	8	6	1	2	1	28	22	12	9	5	-7	1
Jefferson City §§	Maximum	44	25	32	45	41	27	21	26	22	17	5	1	16	19	20	25	22	14	20	19	19	27	38	44	47	30	14	20	29	21
	Minimum	13	15	12	13	19	24	8	6	8	1	-6	-20	-15	-3	-4	-3	12	-2	0	5	0	6	6	7	30	20	12	12	3	6
Kirksville	Maximum	36	41	27	44	34	28	23	15	21	13	10	1	17	15	21	22	18	24	17	21	23	21	31	40	38	24	14	18	15	19
	Minimum	6	13	12	15	24	21	5	4	6	0	-17	-22	9	4	11	1	6	-8	6	8	5	7	6	22	22	12	5	9	8	-4
Louisiana	Maximum	28	28	24	34	35	43	33	28	24	15	15	15	18	18	16	19	19	15	15	16	18	21	31	36	38	34	24	16	22	22
	Minimum	-2	17	4	18	17	15	11	-2	-3	8	-12	-20	5	5	-10	9	9	-4	2	8	-8	-5	-8	28	33	22	10	11	-12	-8
Macon §§	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mexico §§	Maximum	41	25	28	43	40	27	21	24	20	16	5	0	17	17	20	25	20	15	19	18	20	22	36	42	43	25	14	25	20	20
	Minimum	7	15	10	-1	21	23	7	-2	2	0	-5	-22	-20	5	-6	-6	9	-4	-5	4	5	3	0	6	26	21	9	9	-5	-5
Oakfield	Maximum	40	42	26	42	43	35	25	26	27	23	15	0	17	18	22	27	25	17	21	19	16	28	36	45	52	38	26	25	29	32
	Minimum	7	16	9	17	28	23	11	7	7	4	-8	-21	-4	11	-2	12	12	0	5	8	0	8	6	30	34	26	12	12	4	8
St. Catharine	Maximum	39	38	30	43	39	31	36	19	18	15	13	0	12	15	18	22	20	15	20	22	24	24	33	41	38	28	14	19	22	19
	Minimum	3	16	13	19	22	22	1	0	-7	0	-15	-23	-10	3	-10	0	6	-7	5	8	3	2	0	25	26	13	7	9	-12	-2
St. Louis (1)	Maximum	42	42	26	41	42	32	23	25	23	21	15	2	16	20	19	27	23	14	18	17	16	26	34	43	45	34	18	24	27	31
	Minimum	14	17	12	20	30	23	16	14	13	10	-11	-17	-1	11	4	14	13	6	11	12	7	12	10	33	31	15	14	15	13	8
Unionville §§	Maximum	43	23	30	45	36	24	28	18	20	14	-10	-7	14	12	18	20	14	12	15	20	24	18	38	42	36	18	10	15	18	0
	Minimum	10	12	10	12	18	23	6	6	-6	-6	-10	-20	-20	-7	-7	-7	-5	-6	-5	-4	3	5	5	16	16	12	4	3	-12	-12
Warrenton §§	Maximum	41	24	27	40	40	26	20	26	19	19	4	0	15	17	19	23	18	11	16	16	20	24	38	41	42	28	13	19	29	28
	Minimum	8	14	8	9	20	26	9	8	3	3	-4	-21	-19	-5	-4	-4	9	-3	-3	5	1	6	3	6	29	24	10	9	1	1
Southeast Lowlands.																															
Caruthersville	Maximum	32	38	32	45	47	53	34	36	32	30	22	10	24	33	26	32	29	24	20	24	21	34	43	48	60	53	43	31	31	40
	Minimum	16	25	12	18	34	32	24	20	25	13	5	-15	-7	19	11	17	14	11	9	2	1	0	6	20	29	39	23	28	16	17
Doniphan	Maximum	30	43	28	42	42	38	32	30	35	35	20	3	18	23	23	33	29	26	26	23	18	33	36	45	52	53	49	30	27	39
	Minimum	20	23	10	15	25	29	22	15	22	-1	0	-14	-16	16	0	0	9	-5	-4	-2	-8	-5	-4	8	0	6	9	2	8	0
Jackson	Maximum	28	40	30	37	42	40	29	30	30	22	21	1	15	20	22	35	34	25	20	20	15	37	30	47	55	57	55	30	30	35
	Minimum	5	20	9	16	20	25	20	12	17	-7	-1	-18	-10	12	-15	-5	10	-18	-17	-5	10	-15	-14	14	11	26	16	11	1	9
Marble Hill	Maximum	30	40	29	30	40	40	34	30	45	40	27	4	7	22	23	30	30	34	34	30	17	35	33	56	69	57	57	30	28	39
	Minimum	6	21	16	10	30	24	13	10	12	15	0	-17	-10	-11	-2	2	15	-1	-8	2	-12	-2	-5	20	23	39	15	8	3	3
Poplar Bluff §§	Maximum	41	35	31	41	10	32	39	33	37	25	16	14	21	24	23	32	34	25	21	24	15	32	39	50	59	54	36	33	29	40
	Minimum	12	12	7	8	10	28	20	11	10	1	6	-18	-18	10	10	13	7	-3	-7	-1	-9	-7	-6	-1	20	22	17	16	7	8
Ozark Plateau.																															
Birchtree	Maximum	31	40	30	40	39	35	29	27	33	25	18	0	14	19	25	31	28	24	22	22	16	35	37	46	58	60	46	27	34	40
	Minimum	15	20	10	15	23	23	16	10	10	7	-7	-19	-11	11	-5	10	9	1	1	4	-1	6	2	23	27	37	17	17	5	0
Cassville	Maximum	52	56	40	54	45	34	30	31	32	26	19	-5	22	21	30	26	26	22	23	18	21	37	47	52	54	63	33	31	34	32
	Minimum	17	27	12	18	23	20	5	5	22	6	-7	-18	-12	17	-11	18	5	2	5	-14	-13	-11	3	23	21	29	20	12	7	12
Eldon	Maximum	44	44	33	48	44	36	26	28	26	19	18	0	-15	22	20	25	21	11	20	19	19	28	37	45	46	36	22	22	25	22
	Minimum	8	12	11	18	18	18	6	7	4	6	-17	-22	-11	9	-8	9	9	-3	2	0	-1	2	3	30	32	19	16	9	1	0
Fruit City	Maximum	29	43	30	40	28	44	31	30	33	29	19	6	19	20	26	31	27	26	21	25	22	34	33	45	58	61	47	27	30	38
	Minimum	11	19	16	10	13	19	20	10	20	19	-4	-19	-9	-4	-1	10	11	-3	4	17	-1	8	7	26	33	36	14	16	5	12
Gano	Maximum	35	40	30	40	46	36	23	28	26	23	17	-5	12	17	23	27	24	16	19	19	14	31	35	41	53	50	25	22	33	29
	Minimum	10	17	12	16	29	20	11	8	14	2	-12	-22	-7	10	-4	13	11	-1	2	7	-7	5	5	27	31	25	12	13	2	7
Hollister	Maximum	38	46	48	52	40	42	36	34	38	40	38	32	38	36	38	32	34	32	28	28	18	[illegible]	28	22	38	44	48	50	34	30
	Minimum	8	10	12	16	24	20	18	16	14	16	4	-14	-6	4	-6	16	2	4	2	-8	-8	-6	-10	8	20	28	26	24	8	10
Ironton §§	Maximum	43	24	28	39	42	34	28	27	30	28	17	0	15	20	25	30	28	16	21	22	15	34	32	45	55	57	31	25	30	36
	Minimum	16	22	8	14	21	26	14	0	18	-8	4	-20	-8	-4	-12	2	14	-4	-10	1	-17	-6	-11	11	27	28	13	17	12	0
Koshkonong	Maximum	33	43	33	43	43	35	30	29	20	20	18	0	16	19	23	31	30	22	21	26	14	35	42	46	60	59	42	30	29	32
	Minimum	15	21	11	16	28	25	16	15	18	9	-5	-17	-8	13	0	14	11	6	6	6	-1	6	9	25	33	36	19	19	6	8
Lebanon §§	Maximum	47	23	32	48	48	28	32	29	28	20	0	-1	17	20	25	26	22	16	18	22	22	19	22	38	44	28	18	20	34	32
	Minimum	0	10	13	13	20	21	11	11	15	7	-3	-21	-9	-9	-6	-5	11	-2	-1	0	-3	-5	4	7	9	26	15	11	4	4
Mountain Grove §§	Maximum	44	30	30	41	46	24	26	28	29	20	-1	-2	19	18	24	22	23	18	23	23	17	31	36	45	55	60	25	22	31	34
	Minimum	8	12	11	13	20	22	11	11	18	8	-2	-19	-18	-2	-3	-1	9	1	3	6	7	3	7	14	28	36	17	13	6	9
Neosho	Maximum	54	49	40	51	44	35	29	34	33	27	20	13	27	25	30	28	27	24	26	24	22	33	45	50	52	62	28	23	39	35
	Minimum	13	27	32	19	26	23	3	9	20	18	-8	-19	-15	17	-11	17	7	-5	7	-11	-8	-6	2	21	22	26	19	11	7	17
Rolla §§	Maximum	43	24	32	46	48	24	24	29	26	22	-3	-2	16	20	25	24	23	14	23	19	18	29	39	45	53	41	10	23	37	32
	Minimum	11	13	11	11	19	24	12	10	14	5	-2	-21	-2	-2	-3	-3	11	0	0	4	-1	3	3	8	29	30	14	12	4	5
Springfield	Maximum	48	42	31	44	43	28	22	28	27	20	12	0	16	21	22	23	21	15	22	15	16	29	39	43	51	55	23	19	30	28
	Minimum	10	18	14	22	28	17	7	15	14	12	-18	-19	-4	5	0	15	9	2	11	4	5	6	14	26	35	19	16	12	9	3
Southwest Plain.																															
Amoret	Maximum	45	50	37	48	40	38	35	30	28	19	14	-5	17	18	22	27	24	21	22	22	25	30	37	46	47	39	19	29	34	29
	Minimum	15	10	10	20	25	19	7	16	15	12	-14	-23	-10	10	-9	20	11	-1	5	-4	-1	4	6	25	26	18	8	2	-6	0
Appleton City	Maximum	47	45	37	54	43	35	27	29	28	19	9	4	18	18	25	25	21	21	23	23	24	30	35	44	44	40	21	22	35	31
	Minimum	9	26	15	21	27	23	7	14	12	11	-10	-21	-9	12	-6	9	11	0	5	0	1	4	7	21	26	20	13	7	3	6
Clinton	Maximum	47	40	38	49	45	35	21	30	29	19	-5	2	17	19	21	26	25	18	23	22	24	29	32	45	47	38	19	22	35	16
	Minimum	7	22	15	21	26	21	7	10	12	10	-12	-19	-10	-13	-8	10	12	0	5	3	-2	3	6	24	25	19	12	9	1	4
Harrisonville §§	Maximum	50	34	35	46	25	24	26	21	23	15	-5	3	11	18	23	24	23	17	20	18	24	27	37	46	45	25	13	15	30	10
	Minimum	11	12	10	15	23	8	7	8	11	10	-7	-19	-6	-3	-1	1	9	-1	-1	1	-3	1	6	10	25	23	10	2	-9	-5
Lamar §§	Maximum	50	39	40	51	41	25	27	31	27	20	-4	4	20	21	20	25	23	20	30	23	24	30	35	46	51	40	18	24	37	23
	Minimum	13	32	12	24	27	23	6	14	18	15	-5	-21	-5	17	-6	11	5	1	10	-2	0	4	8	20	21	35	16	9	7	11
Lamonte	Maximum	41	45	35	49	37	34	25	28	25	15	13	2	15	16	17	21	19	15	20	20	22	25	35	39	43	40	17	17	31	20
	Minimum	2	20	13	22	13	22	5	-1	4	10	-12	-21	-9	4	16	3	9	-8	-8	-4	-6	3	1	13	24	25	10	6	-12	-1
Marshall	Maximum	39	43	32	45	37	34	24	26	25	16	13	1	16	15	19	22	20	15	20	16	22	24	34	40	46	36	17	16	26	18
	Minimum	6	19	14	19	25	24	6	6	4	9	-14	-20	-10	7	-10	6	7	-4	-5	0	-2	5	0	28	26	17	10	6	-10	2
Warrensburg	Maximum	[illegible]	45	37	48	38	33	24	28	24	16	8	3	17	16	19	24	23	17	19	22	27	26	36	44	46	35	16	19	29	23
	Minimum	9	21	13	23	29	20	7	15	8	8	-14	-20	-7	10	-3	10	12	-1	4	4	6	7	11	27	30	16	10	7	-3	-1
Warsaw	Maximum	52	44	40	50	53	34	23	28	28	18	25	2	20	24	26	24	26	21	20	28	28	28	45	54	50	40	20	23	36	30
	Minimum	1	20	11	20	19	23	4	-3	15	6	-5	22	-17	10	-20	7	12	-7	0	-11	-12	-10	-8	23	21	18	12	6	-1	7
Northwest Plateau.																															
Chillicothe §§	Maximum	45	28	32	48	38	24	21	21	23	15	-6	2	10	15	22	24	20	17	21	23	25	25	40	44	40	19	12	19	23	8
	Minimum	...	...	...	...	...	...	...	...	...	...	-10	-20	-12	-3	-11	-5	-5	-4	-4	3	7	4	6	14	25	7	8	6	-14	-1
Grant City	Maximum	47	44	40	47	42	30	16	18	22	17	12	-2	14	16	26	20	16	15	19	22	25	23	43	52	47	23	8	12	20	12
	Minimum	10	12	16	21	29	12	2	6	-2	-3	-17	-21	-12	-2	-5	4	7	-5	2	4	4	8	9	29	23	7	2	0	-14	-9
Kansas City	Maximum	49	45	36	47	39	27	26	27	20	15	0	6	17	17	23	23	22	20	19	22	25	28	41	51	43	21	11	17	27	18
	Minimum	11	21	18	26	27	15	8	18	8	0	-16	-16	-2	8	3	15	11	5	8	8	13	12	18	30	21	11	9	3	2	-7
Kidder §§	Maximum	55	26	32	48	39	26	22	20	21	16	-11	2	12	13	20	20	21	16	17	20	24	21	41	47	42	21	11	13	20	5
	Minimum	17	26	16	20	30	23	4	16	-2	11	-12	-21	-8	6	-6	3	10	-2	2	6	7	7	11	30	29	18	8	0	8	2
Lexington §§	Maximum	40	32	33	48	40	25	23	28	21	15	5	4	16	15	20	25	23	18	20	23	25	27	37	44	45	22	32	20	27	10
	Minimum	11	31	15	22	26	23	7	11	5	11	-9	-19	-6	11	0	10	13	0	1	4	5	9	8	32	32	21	10	5	-6	3
Maryville §§	Maximum	51	21	32	48	27	22	22	20	23	12	13	2	16	16	21	20	20	17	17	24	30	21	48	54	35	15	9	5	18	-5
	Minimum	1	13	12	16	19	20	0	0	4	1	-19	-23	-13	-7	-9	-9	3	-4	-5	-5	-5	7	7	15	26	12	1	-5	-11	-9
Oregon	Maximum	50	43	31	43	37	25	20	23	18	15	0	1	17	17	23	22	17	17	18	24	25	22	46	48	45	26	8	14	20	15
	Minimum	12	16	12	20	20	15	2	16	0	2	-20	-21	-9	-1	-5	5	12	2	5	-1	10	8	12	25	25	7	1	-6	-8	-9
St. Joseph	Maximum	51	42	34	48	36	26	24	24	22	15	-3	1	17	17	23	21	20	18	18	23	25	26	46	52	41	22	10	17	22	11
	Minimum	15	20	17	25	26	13	5	17	5	-3	-19	-19	-1	1	1	10	8	3	6	3	13	11	17	30	22	9	6	0	-8	-8
Trenton	Maximum	43	40	30	41	37	28	20	20	18	15	1	1	15	15	22	22	18	16	19	20	26	21	40	45	42	21	12	15	20	12
	Minimum	14	16	16	19	24	20	5	10	3	2	-18	-20	-1	-7	-5	6	9	-1	6	9	10	9	8	29	24	11	6	7	11	1

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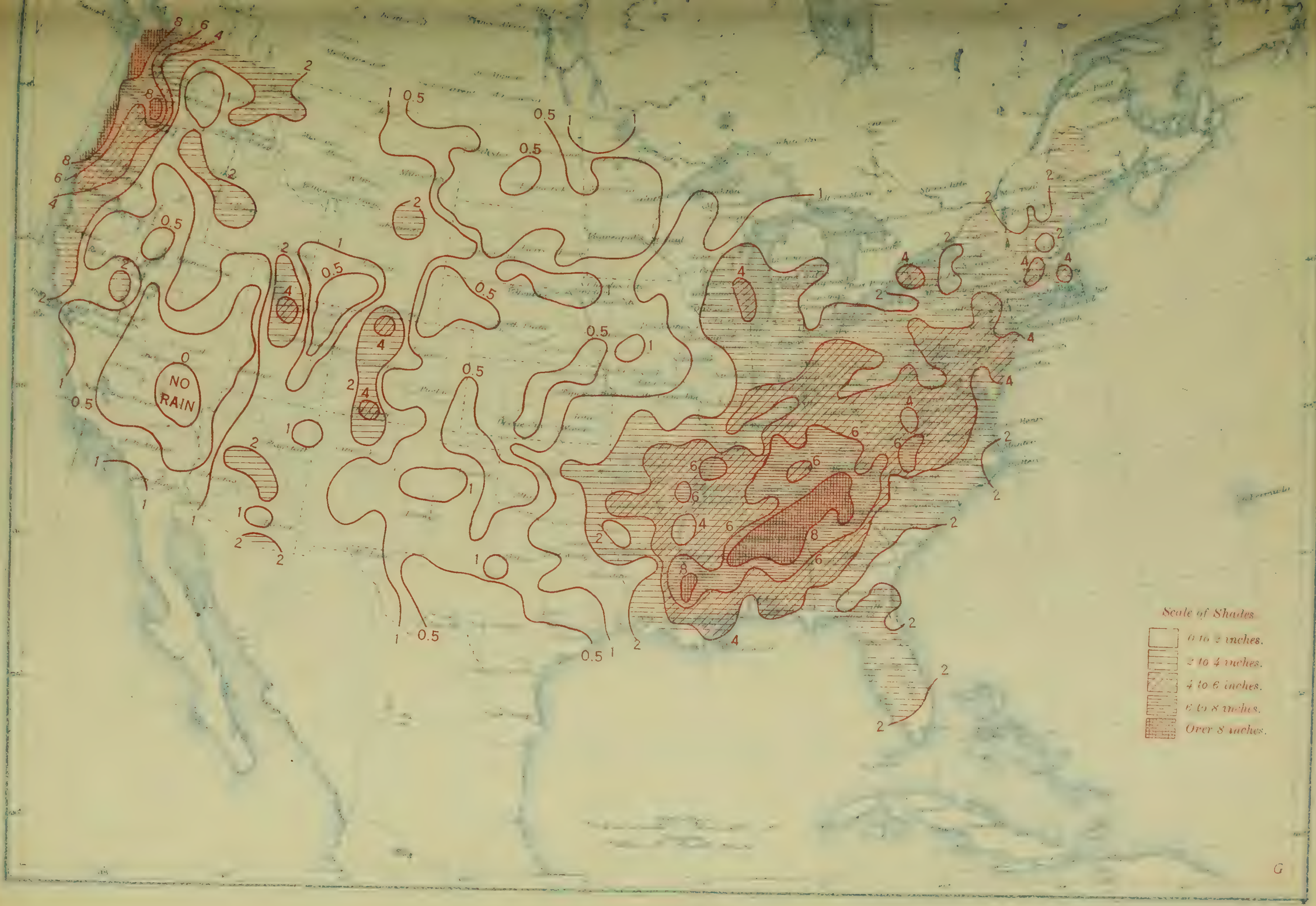
a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is char
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
0
0.5
1
2
4
6
8
G

REMARKS BY OBSERVERS.

Koshkonong---R. M. Hitt: This winter will not be soon forgotten. More snow fell this month than usually falls all winter. Stock suffered.

Warsaw---J. R. Smith, M. D.: This has been the coldest January on record. There was 26 days of continuous sleighing weather. The Osage River has been frozen over (closed) for the past 42 days.

Gorin---J. W. Pulliam: The snow of the 6th blocked all roads. The cold has been extreme.

St. Catherine---L. D. Baker: The coldest month I ever experienced here.

St. Louis University: The coldest January in the history of St. Louis weather.

Birchtree---V. H. Kirkendell: One of the worst stormy months known here.

Crocker---Roy W. Reed: Old settlers say that this was the coldest January in many years.

Fruit City---R. C. Walton: Extreme cold; heavy snows. Not a peach bud alive on January 31st.

Houston---R. F. Harmon: The ground has not b of snow since December 7th.

Caruthersville---H. E. Averill: This month has worst in history of this station for continued cold. snow

Meteor Evening of the 22d.

Warrensburg---Geo. H. Collins.: Just at 6 o'clock a meteor flashed in the west, traveling northwest, and burst like a rocket directly northwest from this station. not yet dusk, its brilliance was like a flash of lightning observed by many persons.

Bethany---M. H. Moulton: A large meteor cross from north to south, lighting the sky and houses. It to the west of us, and burst just in front of the evenin 5.50 p. m.

Oregon---Tom Curry. On the 22d, 6 p. m., a mete over from northwest to southeast and exploded in two report like heavy cannon followed the explosion in a minutes.

Fayette---T. Berry Smith: A big meteor was see northwest at 6 p. m.

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	15	0.30	−1.72	0.30	......	1	18	0	13	.....	Wm. R. Bennett.
Boonville	41	0.99	−0.99	0.30	......	6	14	1	16	nw.	C. Randecker.
Cape Girardeau ...	11	4.00	−0.10	1.20	37.0	9	7	5	19	w.	D. L. Albert.
Glencoe	1	....	....	....	......	..	..	..	..	......	Vint R. Neel.
Hermann...........	44	1.08	−1.15	0.29	18.0	9	13	8	13	w.	C. T. Maushund.
New Madrid.......	24	5.49	+0.15	1.40	......	14	11	5	15	ne.	Miss Josie Smith.
Osceola............	18	....	....	....	......	..	..	..	..	......	Wm. E. Mathews.
Pacific	1	1.34	....	0.43	......	9	11	6	14	......	R. C. Dougherty
Steelville..........	16	0.66	−1.39	0.39	......	2	14	0	17	w.	Wm. J Drennen.
Tuscumbia.	1	1.18	....	0.42	......	7	12	4	15	w.	C. B. Wright.
Union	1	1.43	....	0.38	12.5	8	10	7	14	nw.	J. Wm. Keller.
Valley Park.......	1	1.20	....	0.30	8.1	9	15	2	14	w.	H. J. Lucksinger.
Waverly	3	0. 8	....	0.28	14.0	6	16[a]	5[a]	9[a]	nw.	J. W. Cauthorn.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

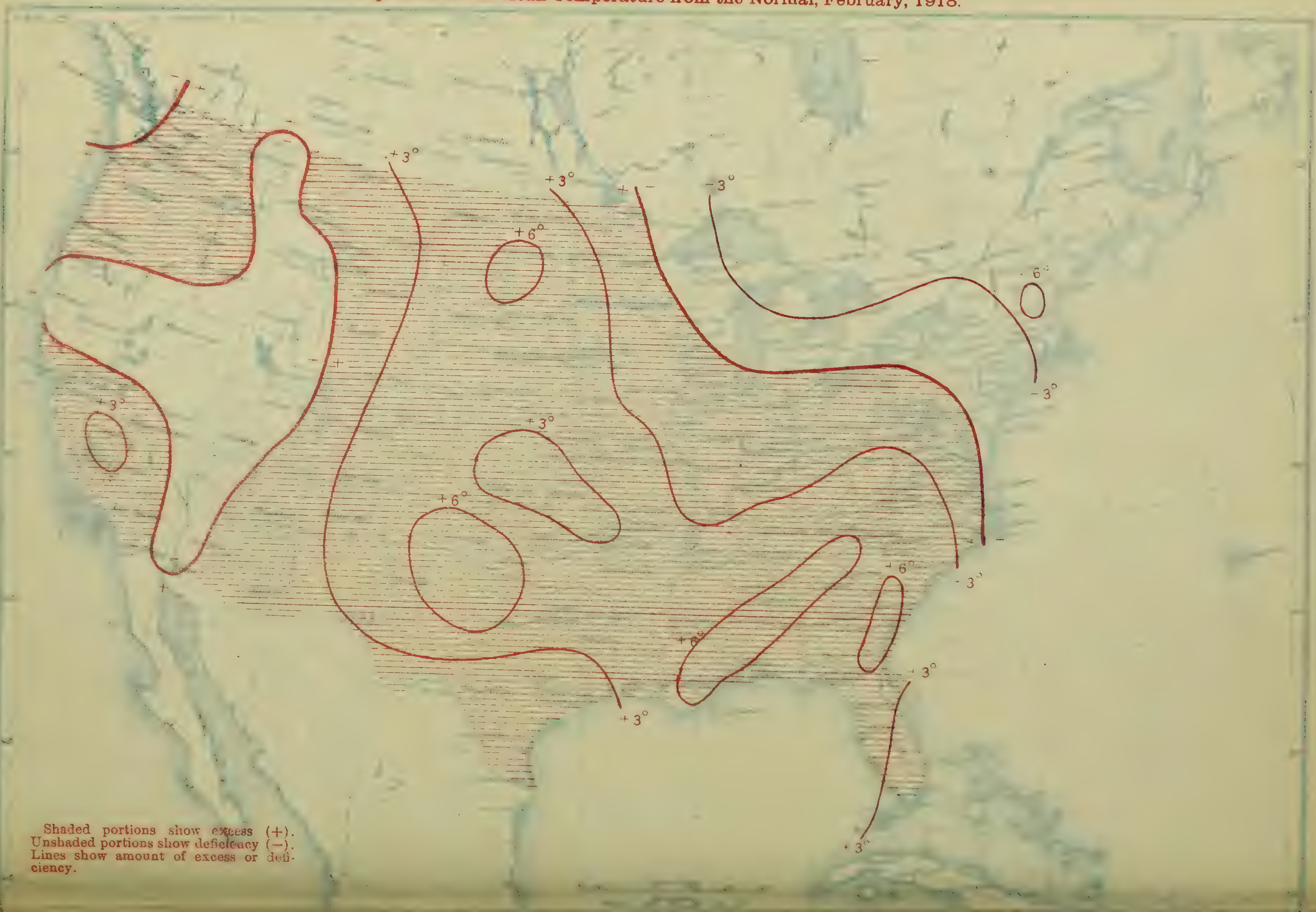
FEBRUARY, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
APRIL 3, 1918.

Departure of the Mean Temperature from the Normal, February, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

L. XXII. COLUMBIA, MO., FEBRUARY, 1918. No. 2.

GENERAL SUMMARY.

he extreme cold experienced during January continued r the first four or five days of February, but the remainder ebruary was comparatively moderate. Except the first week, from the 20th to 22d, the month was generally favorable ost outdoor occupations.

he monthly precipitation was considerably less than the mal everywhere, but the deficiency was somewhat less ked in the northern half of the State. The snowfall was mportant. February made the sixth consecutive month deficient precipitation. Reports indicate that there is tically no sub-soil moisture; and in many counties there is t need of water for actual drinking purposes.

he weather, as a whole, was generally favorable for wheat, the crop was rated as fair to good at the close of the month; e still is, however, a considerable part of the late sown in northern half of the State not yet up, or just coming up. the other hand, wheat in the Missouri and Mississippi river oms is in good to excellent condition. The general state of also is fair. Some oats were sown in a few of the west-cen- counties.

tock stood the winter well; feed still is plentiful, but water arce away from the larger streams. Peaches were winter d. Apples were uninjured.

TEMPERATURE.

e monthly mean temperature, 65 stations reporting, was 34.9°. The rture from the normal for 60 stations having 10 or more years' rec- was plus 4.6°. The first four days were unusually cold, but with the warm period set in which continued for ten days to two weeks; the inder of the month also was moderate, a few days only being colder normal. During the last week day temperatures reached 75° or er on one or more days in nearly all sections. The minimum---25°, e 1st, is the lowest temperature that has occurred in February for al years. Zero temperatures occurred on an average of 2 days; there , however, no zero temperatures after the 4th.

PRECIPITATION.

e average precipitation, 82 stations reporting, was 1 11 inches. The rture from the normal for 73 stations having 10 or more years' rec- was minus 1.26 inches. The month was drier than usual in all parts e State, but it was not as dry as the same month in 1916 and 1917. ary completed the sixth consecutive month (since August, 1917) deficient precipitation. Reports have been received from many ties regarding the great need of water. The greatest local monthly pitation was 2.15 inches, at Liberty; and the least monthly amount 0.00, at Dean. The greatest amount recorded in any 24 consecu- hours was 2.00 inches, at Bolivar on the 11th and 12th, and 2.00 s. at Liberty on the 28th. The monthly snowfall was light and portant; the lightest in fact ever recorded in February.

e average number of days with 0.01 inch or more precipitation was 4.

WIND.

e prevailing winds were from the south. The monthly wind velocity, rded at 8 stations having anemometers, was 8,317 miles, being tly above normal. Fresh to strong westerly winds prevailed on the and 25th.

SUNSHINE AND CLOUDINESS.

ruary was quite bright for a winter month. The average number of of sunshine, based upon records of 5 regular stations, was 201. This is t 64 per cent of the possible, and about 13 per cent greater than normal.

MISCELLANEOUS PHENOMENA.

Fog---7th, 8th, 19th, 24th, and 28th.
Hail, small---8th, and 15th.
Halos, solar---2d, 5th, 7th, 10th, 11th, 21st, 23d, and 24th.
Halos, lunar---5th, 20th, 21st, 23d, 24th, and 26th.
Thunderstorms, moderate---8th, 12th, 19th, 27th, and 28th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.06	71	......	190	63	7,145	10.6	45	sw.	14
Hannibal	30.06	78	......	......	......	7,737	11.5	54	sw.	14
Kansas City	30.07	66	53	210	70	9,829	14.6	53	nw.	25
St. Joseph	30.07	74	59	189	63	7,262	10 8	46	nw.	25
St. Louis	30.08	77	64	170	56	11,243	16.7	65	sw.	14
Springfield	30.09	84	69	225	74	8,907	13.3	46	w.	14
Cairo, Ill	30.12	79	71	......	......	7,677	11.4	42	nw.	25
Keokuk, Iowa	30.08	82	68	191	61	6,739	10.0	48	sw.	14

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	33.0	+2.0	73	—11	2.04	−0.28	......	.....	7	....	....	....
1889	29.3	−1.7	73	− 9	2.57	+0.25	......	.....	7	....	....	....
1890	35.5	+4.5	81	− 7	2.24	−0.08	......	.....	7	....	....	....
1891	32.7	+1.7	76	− 8	2.28	−0.04	......	2.4	6	....	....	....
1892	37.7	+6.7	71	2	4.15	+1.83	......	.....	9	7	6	16
1893	27.9	−3.1	65	—20	1.98	−0.34	2.30	4.6	6	10	7	11
1894	30 8	−0.2	72	−12	2.52	+0.20	2.60	11.2	6	10	8	10
1895	23.6	−7.4	77	—26	0.55	−1.77	1.10	3.3	5	10	10	8
1896	35.6	+4.6	81	−10	1.61	−0.71	2.20	4.1	5	12	8	9
1897	34.8	+3.8	74	—15	2.30	−0.02	3.60	8.2	7	7	7	14
1898	35.4	+4.4	78	− 9	1.62	−0.70	2.90	0.8	5	13	6	9
1899	20.4	−10.6	72	—32	2.17	—0.15	4.30	5.3	6	12	8	8
1900	26.2	—4.8	70	−16	3.92	+1.60	2.85	16.6	10	10	6	12
1901	28.1	−2.9	76	—19	1.63	−0.69	2.36	7 6	6	13	7	8
1902	24.0	−7 0	72	—17	1.50	−0.82	2.35	5.8	5	11	8	9
1903	29.8	−1.2	74	—25	2.92	+0.60	2.65	5.3	7	11	6	11
1904	30.0	−1.0	82	—18	0.91	—1.41	1.46	1.5	5	11	8	10
1905	21.5	−9.5	69	—40	1.64	−0.68	1.20	13.2	8	11	6	11
1906	33.7	+2.7	73	—13	2.28	−0.04	2.40	4.1	7	15	6	7
1907	34.8	+3.8	77	−15	1.65	−0.67	3.72	4.5	6	12	5	11
1908	35.6	+4.6	78	− 7	4.32	+2.00	4.28	4.1	9	13	6	10
1909	38.8	+7.8	71	— 4	3.38	+1.06	2.50	3.1	9	13	5	10
1910	28.3	−2.7	72	—24	1.98	−0.34	3.00	7.7	6	12	6	10
1911	38.1	+7.1	87	0	3.64	+1.32	2.08	6.3	8	12	5	11
1912	28.3	−2.7	72	—12	2.45	+0.13	3.20	11.9	6	10	7	12
1913	29.8	−1.7	78	— 9	2.21	−0.18	4.78	8.5	7	12	5	11
1914	28.3	−3.2	75	−11	2.71	+0.42	2.80	14.0	7	12	6	10
1915	39.4	+8.0	72	7	3.18	+0.81	2.05	4.1	8	9	5	14
1916	31.4	+0.2	78	—12	0.98	−1.48	2.70	5.0	5	13	6	10
1917	30.5	−1.0	83	−22	0.41	—2.03	1.24	1.4	2	14	7	7
1918	34.9	+4.6	83	—25	1.11	−1.26	2.00	0.6	4	15	6	7

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	1.00	−1.91	0.80	......	2	13	1	14	.....	Wm. R. Bennett.
Boonville	41	0.87	−1.71	0.45	T.	4	16	2	10	se.	C. Randecker.
C. Girardeau	11	0.42	−1.99	0.15	0.0	4	10	3	15	w.	D. L. Albert.
Glencoe	1	....	....	....	......	..	..	..	..	......	Vint R. Neel.
Hermann	44	1.34	−1.09	0.74	1.0	5	10	4	14	e.	C. T. Maushund.
New Madrid	24	1.67	−2.46	0.70	0.0	6	9	4	15	sw.	Miss Josie Smith.
Pacific	18	1.51	....	0.78	......	6	11	4	13	.....	Wm. E. Mathews.
Osceola	1	0.91	−1.16	0.45	......	3	11f	1f	10f	......	R. C. Dougherty.
Steelville	16	0.95	−1.58	0.60	......	5	14	1	13	s.	Wm. J Drennen.
Tuscumbia	1	0.93	....	0.74	......	3	12	3	13	s.	C. B. Wright.
Union	1	1.32	....	0.67	T.	6	12	5	11	sw.	J. Wm. Keller.
Valley Park	1	1.33	....	0.49	0.1	5	14	1	13	nw.	H. J. Lucksinger.
Waverly	3	1.63	....	1.24	......	4	19a	2a	6a	nw.	J. W. Cauthorn.

Climatological data for February, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observer.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. of .01 or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	37	32.4	+3.9	71	24	−9	1	52	1.41	−0.06	0.99	0	4	17	0	11	sw.	Louis Benecke.
Clifton Hill	Randolph	731	....	34.4	+7.1	67	24	−7	1†	49	1.64	0.32	1.17	0	5	13	11	4	.....	L. S. H[illegible]
Columbia	Boone	784	27	33.7	+3.6	69	23	1	1	48	1.30	0.83	0.61	T	6	13	7	8	s.	U. S. Weather B
Fayette	Howard	725	32	31.1	+1.1	66	23	8	2	47	0.99	1.09	0.60	T	1				.....	Prof. [illegible]
Fulton	Callaway	818	13	34.6	+2.4	73	23	10	2	49	2.00	0.10	0.96	0	5	15	6	7	nw.	Dr. O. M. Weig
Gorin	Scotland	700	28	...	.....	....		....	....		[illegible]	0.18	1.12	T	3	8	10	10	sw.	J. W. Putnam.
Hannibal	Marion	534	24	31.8	+2.7	68	23	−9	1	49	0.88	−0.72	[illegible]	0.1	7	13	7	8	sw.	U. S. Weather B
Jefferson City	Cole	557	31	34.2	+3.4	72	23	3	2	48	0.52	1.32	0.52	1.0	5	15	5	8	n.	Miss L[illegible] Sw
Keytesville	Chariton	660	1	.....	.....	.....	.....	.....	.....		1.17		0.78	0	4	...	...	.	.....	J. T. Dewes, M
Kirksville	Adair	969	25	30.0	+5.1	66	24	13	1	47	[illegible]	0.25	[illegible]	0.5	5	10	15	3	s.	Prof. Mark Bur
Louisiana	Pike	469	39	32.8	+4.4	64	24†	−15	2	51	[illegible]	0.91	0.40	0.5	7	18	6	4	w.	C. T. Far[illegible]
Macon	Macon	875	19	29.6^{a}	+1.5	67	8†	−1	1	51	1.90	[illegible]	1.00	0	1	8	17	3	s.	Chas. N. Tolma
Mexico ††	Audrain	797	39	32.4	+3.7	70	23	−7	2	[illegible]	0.52	−1.93	0.52	0	1	14	0	14	s.	R. M. Llewellyn.
Oakfield	Franklin	793	36	37.2	+5.1	73	23	−1	1	[illegible]	1.68	[illegible]	1.05	0.5	4	9	11	8	s.	E. L. Steines.
Palmyra	Marion	652	5	31.0	+4.2	66	23	−14	1	44	1.02	1.27	0.40	0.1	5	15	4	9	sw.	W. B. Markell.
St. Catherine	Linn	850	4	30.2	....	65	24	−15	1	46	1.45	...	1.03	T	3	16	5	7	sw.	L. D. Baker.
St. Charles	St. Charles	456	39	35.6	+3.9	71	23	−2	2†	41	0.55	−2.55	0.30	T	2	10	8	2	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	46	35.6	+2.1	70	19	2	1	51	2.09	−0.66	1.10	0.2	7	12	7	9	s.	U. S. Weather B
St. Louis (2)	.....do	578	5	34.1	.....	69	14†	1	4	51	1.98	......	1.08	0.1	7	12	6	10	nw.	St. Louis Univer
Shelbina	Shelby	779	25	...	.....	.....	...	.....	.....	.	1.17	1.02	0.95	0	2	....	....	.	.....	S. G. Parsons
Steffenville	Lewis	650	21	30.5	+3.2	76	25	−18	4	53	1.68	−0.37	1.10	0	4	13	9	6	w.	Frank Hall
Unionville	Putnam	1,072	24	26.2	+1.9	70	24	−21	1	61	1.58	−0.42	0.90	5.0	5	19	3	6	n.	Geo. W. Davis.
Warrenton	Warren	865	26	32.4	+3.0	65	14†	−4	1	56	1.10	−1.41	0.52	0.5	5	5	8	15	s.	Prof. J. H. Fried
Keokuk, Iowa	Lee, Ia.	574	46	29.9	+3.2	65	23	−13	4	45	1.15	−0.47	0.75	0.5	8	11	10	7	nw.	U. S. Weather B
Section means and extremes		....	....	32.5	+7.1	76	25	−21	1	61	1.38	−0.81	1.39	0.1	5	13	7	8	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscott	220	26	46.2	+8.2	82	28	14	1	11	1.45	−2.58	1.00	1.0	4	14	6	8	se.	H. E. Averill.
Doniphan	Ripley	344	12	41.6	+4.2	83	25	10	1	40	0.95	−2.69	0.75	1.0	3	17	2	9	s.	W. W. Martin.
Jackson	Cape Girardeau	458	26	38.8	+3.8	82	28	0	5	47	0.92	−2.19	0.67	0.5	5	9	10	9	s.	L. M. Bean.
Marble Hill	Bollinger	420	25	39.1	+4.2	80	25	5	2†	62	1.16	−2.39	0.90	0	2	19	0	9	s.	Dr. A. F. Hendri
Patton (near)	Bollinger	500	2	.....	.....	.....	.....	.....	....	....	0.80	......	0.50	0	3	....		..	.....	George F. Ellis
Poplar Bluff	Butler	339	13	37.6^{b}	+2.0	81	25†	6	1	48	0.66	−2.82	0.57	0.2	4	9^{a}	7^{a}	11^{a}	.....	Miss Belle Kna
Cairo, Ill.	Alexander, Ill	359	14	40.4	+2.8	78	28	9	4	43	1.03	−2.30	0.54	0.8	4	7	9	12	s.	U. S. Weather Bu
Section means and extremes		....	....	40.6	+4.2	83	25	0	5	62	0.99	−2.50	1.00	0.5	4	12	6	10	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	23	39.8	+5.6	80	24	2	2	43	0.86	−1.90	0.78	0	2	21	3	4	s.	V. H. Kirkendal
Bolivar	Polk	1,071	29	37.2	+3.1	67	24	0	1	36	2.00	−0.42	2.00	0	1	17	7	4	se.	A. C. Fink.
Cassville	Barry	1,500	6	41.2	....	79	24	4	1	61	0.12	−1.94	0.12	0	1	20	1	7	w.	William Talbert.
Crocker ††	Pulaski	1,126	6	30.6^{k}	+9.9	77	12	1	1	....	......	......	......	......	....	14^{k}	1^{k}	2^{k}	.....	Roy W. Reed.
Dean	McDonald	1,000	18	39.6^{b}	+5.8	79	24	2	1	49	0.00	−2.07	0.00	0	0	22^{b}	0	4^{b}	e.	H. E. Dean.
Eldon	Miller	934	16	34.6	+2.9	79	23	−3	1	50	0.45	−2.04	0.40	0.2	2	12	13	3	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	4	39.8	.....	77	24	5	1	37	0.85	−2.77	0.30	0	3	15	9	4	s.	R. C. Walton.
Gano	Dent	1,250	13	37.0	+2.6	71	21†	1	1	42	0.65	−2.07	0.55	T.	3	14	7	7	sw.	A. C. Leach.
Goodland	Iron	1,000	12	37.3	+5.0	75	24†	0	2	50	1.10	−1.67	0.65	0	2	66	6	6	s.	F. M. Adams.
Hollister	Taney	735	8	38.1	+0.2	76	26	8	1†	54	T.	−2.60	T.	0	0	22	0	6	nw.	W. P. Chapman
Houston	Texas	1,280	24	40.2	+8.0	77	24	4	1	41	1.08	−1.37	0.56	T.	2	15	6	7	se.	R. F. Harmon.
Ironton	Iron	925	39	36.6	+3.3	77	25†	−1	2	46	0.98	−2.41	0.60	T	4	4	16	8	sw.	W. H. Delano.
Koshkonong††	Oregon	958	16	41.4^{a}	+4.8	85	24	7	1	52	0.67	−2.44	0.57	0.5	3	13^{a}	8^{a}	6^{a}	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	28	34.9	+1.0	74	23†	−2	1	55	0.70	−1.97	0.65	0	2	20	3	5	s.	Leonard E. Dicke
Lockwood	Dade	1,078	22	39.2	+4.2	72	24	−1	1	42	0.52	−1.69	0.36	T.	2	15	2	11	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	18	37.8	+2.3	76	24	1	1	46	0.22	−2.35	0.15	0	2	15	8	5	nw.	Mo. Fruit Exp. S
Mount Vernon	Lawrence	1,480	38	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	....	....	....	....	....	.....	C. L. White.
Neosho	Newton	1,011	34	41.2	+4.9	76	24	2	1	47	0.04	2.52	0.04	0	1	21	2	5	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	35.4	0.0	74	23	−2	1	53	1.01	−1.32	0.82	T.	3	12	13	3	s.	Prof. Elmo G. Ha
Springfield	Greene	1,350	29	37.6	+4.0	72	23	1	1	50	0.64	−1.63	0.49	T.	4	19	6	3	s	U. S. Weather Bu
Section means and extremes		....	....	38.1	+3.5	80	24	−3	1	61	0.66	−1.93	2.00	T.	2	17	6	5	s.	
Southwest Plain.																				
Amoret	Bates	831	8	35.3	+1.8	74	24	−8	1	43	0.88	−1.82	0.36	T.	3	18	4	6	ne.	Darby Fruit Far
Appleton City	St. Clair	873	26	36.5	+4.8	70	24†	−4	1	42	0.73	−1.43	0.47	T.	5	17	5	6	sw.	W. G. Bigelow.
Clinton	Henry	765	30	35.8	+4.4	71	8	−5	1	44	0.77	−1.49	0.38	0	3	13	9	6	ne.	A. E. Derwent, M
Harrisonville	Cass	912	44	32.6	+3.1	72	24	−10	1†	47	1.00	−1.16	1.00	0	1	11	5	12	sw.	A. J. Sharp.
Lamar	Barton	980	36	39.6	+5.5	75	24	−2	1	38	0.43	−1.98	0.23	0	2	16	2	10	s.	Joe W. Springer.
Lamonte	Pettis	863	28	33.8	+2.6	69	8†	−9	1	45	1.38	−0.66	1.00	0	2	17	5	6	nw.	J. Ed. Hall.
Marshall	Saline	779	26	34.1	+5.1	69	8	−8	1	46	1.68	−0.27	1.18	T.	4	15	8	5	sw.	Dr. W. H. Black.
Warrensburg	Johnson	883	38	34.7	+3.6	70	8	−8	1	46	1.16	−1.04	0.70	0	4	14	9	5	sw.	Geo. H. Collins.
Warsaw	Benton	715	12	35.6	+2.3	75	24	−4	1	49	1.00	−1.80	0.60	T.	3	16	10	2	w.	J. R. Smith, M. D
Section means and extremes		....	....	35.3	+3.7	75	24	−10	1†	49	1.00	−1.30	1.18	T.	3	15	6	7	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	32.6	+3.8	66	24	−13	1	31	2.04	−0.13	1.62	0	4	19	5	4	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	29.2	+3.0	73	11	−25	1	50	0.78	−0.78	0.65	6.5	2	16	7	5	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	29.0	2.8	68	24	−16	1†	57	1.50	−1.03	1.20	0	2	15	7	6	sw.	Dr. J. R. Campb
Conception	Nodaway	982	32	29.8	+3.4	72	23	−15	1	43	1.24	−0.02	0.74	4.5	2	14	10	4	sw.	Fr. Adelhelm He
Gallatin	Daviess	803	17	......	......	......	......	......	......	....	0.94	−0.75	0.82	0.5	3	16	5	7	nw.	Robert R. Wynne
Grant City	Worth	1,134	24	29.4	+2.8	67	23	−20	1	43	0.70	−0.43	0.30	7.0	3	18	4	6	s.	W. H. Campbell.
Kansas City	Jackson	963	28	34.0	+4.1	69	23	−9	1	42	1.53	−0.06	1.32	0.1	5	15	8	5	sw.	U. S. Weather Bu
Kidder	Caldwell	1,020	26	33.6	+6.9	72	11	−14	1	34	1.05	−0.58	1.00	0	2	17	5	5	nw.	J. F. Sharp.
Lexington	Lafayette	688	35	31.3	+5.3	70	8	−10	1	45	1.94	−0.15	1.74	0	3	18	0	10	n.	J. W. Keithley.
Liberty	Clay	861	28	38.6^{b}	+9.2	71	24	......	...	42	2.15	+0.21	2.00	0	2	17^{b}	4^{b}	5^{b}	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	25.8	+2.5	72	23	−20	1	63	1.92	+0.42	1.02	6.0	4	22	0	6	n.	J. R. Brink.
Oregon	Holt	1,048	61	28.9	+0.9	69	23	−17	1	40	0.72	−0.98	0.60	2.5	3	20	3	5	sw.	Tom Curry.
St. Joseph	Buchanan	967	45	31.9	....	71	23	−13	1	42	1.07	−0.27	1.04	1.0	4	13	7	8	nw.	U. S. Weather Bu
Tarkio	Atchison	976	5	29.8	+3.0	72	23	−17	1	44	0.79	−0.27	0.41	3.5	3	15	7	6	sw.	John F. Frazier.
Trenton	Grundy	822	22	29.4	+1.7	62	11	−15	1	43	1.04	−0.64	1.00	1.0	2	13	8	7	s.	W. H. Estes.
Section means and extremes		....	....	31.2	+3.4	73	11	−25	1	63	1.29	−0.36	2.00	2.2	3	17	5	6	sw.	
State means and extremes		....	....	34.9	+4.6	83	24	−25	1	63	1.11	−1.26	2.00	0.6	4	15	6	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for February, 1918.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
st Plain.																																	
	Missouri												.12	.22						T.	.08					T.	T.		.45				0.87
	Grand									.10			.20								.12								.99				1.41
Hill	Chariton									.03		T.	.20							.11								.13	1.17				1.64
	Missouri	T.							.34			.37	.24				T.		T	.10						T.		.23	.02				1.30
	do												.25							.14								.27	.33				0.99
	do								.09				.96						T.	.50					T.	T		.40	.05				2.00
	Meramec																																
	Mississippi								.03	.29							T.												1.12				1.44
	do								.02			.05	.44			T.	T.		T.	.04	T.					.01		.16	.16				0.88
	Missouri	.02	T.		T.					.05			.74	.23			T.			T.	T.					T.			.30				1.34
ity	do	.02			T.					.15			.52	.06							T.								.17				0.92
	Chariton								.02											.12								.25	.78				1.17
	Mississippi								.05			T.	.22		.01		.01			T.								T.	1.39				1.68
	do	.03								.40			.64				T.		.04	.10						T.		.24	.11				1.56
	Chariton																																
	Mississippi																												.52				0.52
	Meramec	T.							.25				1.05						T.	T						T.		.19	.19				1.68
	do	T.								.18			.78	.25						.05	.07								.18				1.51
	Mississippi	.01							T.				.39				T.			.11						.11			.40				1.02
	Grand									.38			T.							T.								.04	1.03				1.45
	Missouri	.05																										.30					0.35
(1)***	Mississippi	.02		T.		T.			.18			.04	1.66				T.		T.	.03		T.				T.		.29	.47				2.09
(2)	do	.01		T.					.14			.07	1.01							.02						T.		.27	.46				1.98
	do												.22																.95				1.17
	do								.30	T.			.03				T											.25	1.10				1.68
	Meramec	.01								.22			.67	.26							.01								.15				1.32
	Grand									.30			T.			.20	.08			.10	T.						T.		.90				1.58
Park	Meramec	T.	T.		T.					.15			.49	.43			T.				.04					T.	T.		.22				1.33
	Mississippi	.02								.15			.52	.13			T.			T.							T.		.28				1.10
Iowa***	do								.14	.02		.04	.03			T.	.01		T.	.16						T.		.14	.61				1.15
d Lowlands.																																	
rardeau	Mississippi												.15							.10	.15								.02				0.42
sville	do		.30		T.								.08			.07				1.00								T.					1.45
	Black		.10										.75							.10								T.	T.				0.95
	Mississippi		.01					.02					.67							.09							.13						0.92
Hill	do						.90													.20													1.10
	do		.14	.11									.55				.03			.14	.70												1.67
(near)	do												.50							.10									.20				0.80
	Black		.02	T.									.57				T.			.03	.04				T.				T.				0.66
	Mississippi		.08				T.						.40			T.				.54	T.	T						.01					1.03
Plateau.																																	
	Gasconade									.20			.80							T.								T.	T.				1.00
	Black																			.08									.78				0.86
	Osage												2.00																				2.00
	White											T.				T.					T								.12				0.12
	Gasconade													.84																			
	Neosho																																0.00
	Osage	T.											.40						T.									.05					0.45
ity	Black							T.					.30							.25									.30				0.85
	Meramec									.06			.55								T.							.04					0.65
nd	Black									.65										.45													1.10
	White																												T.				T.
	Gasconade	T.				.52							.56						T.	T.								T.	T.				1.08
	Mississippi									.25			.60				T.			.10								.03					0.98
ng	Black	.05							.05				.57																				0.67
	Osage												.65															.05					0.70
	do											T.	.36				T.											.16					0.52
Grove	White												.15															T.	.07				0.22
non	Neosho																																
	do											.04							T.									T.					0.04
	Meramec		T.	T.	T.					T.			.82	.09			T.			T.								.10	T.				1.01
eld***	White	T.								T		.45	.04	T.					T.	T.								.11	.04				0.64
	Meramec									.11			.60	.15														.03	.06				0.95
mbia ‖	Osage												.74	.01															.18				0.93
west Plain.																																	
	Osage											T.	.30							T.								.22	.36				0.88
on City	do	T.										.01	.10							.03								.47	.12				0.73
	do												.25															.38	.14				0.77
ville‖‖	do												T.	T.						T.									1.00				1.00
	Neosho												.20															T.	.23				0.43
	Missouri											T.	T.							T.								.30	1.00				1.30
	do				T.							T.	.16							.14								.20	1.08				1.68
	Osage												.45															.24	.22				0.91
sburg	Missouri												.05							.09								.32	.70				1.16
	Osage	T.											.60															.35	.05				1.00
	Missouri				T.				T.	.24			.07							.08	T.								1.24				1.63
ered Plateau.																																	
	Grand									.32		.10																.12	1.50				2.04
	do								T.						.13					T.								T.	.65				0.78
the	do																				.30								1.20				1.50
tion	Missouri								T.				T.		.74	.10	.20			T.						T.		.05	.15				1.24
	Grand								T.						T.	T.				.03								.09	.82				0.94
ity	do								T.		T.			T.	.30		.10										T.		.30				0.70
City***	Missouri								T.			T.	.15		T.	T.	T.		.01	.05								.92	.40				1.53
	Grand																									.05			1.00				1.05
gton	Missouri													.15						05									1.74				1.94
	do																			T.								.15	2.00				2.15
ille‖	do									.20				T.		1.02	.20												.50				1.92
	do								.09						.03	T.				T.									.60				0.72
eph***	do								T.			T.			.02	T.	T.			.01								.80	.24				1.07
	do								.21							.41													.17				0.79
on	Grand								T.						.04	T.	T.		T.	T.								.90	.10				1.04

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xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
f observation. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
ular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
of fall not recorded.

Daily temperatures for February, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Northeast Plain.																														
Brunswick §§	Maximum	15	28	20	19	50	53	61	62	44	61	65	55	62	57	29	33	37	51	50	12	21	49	66	71	57	52	41	36	
	Minimum	−9	−7	2	−3	−2	20	31	35	23	22	31	40	32	35	23	20	11	18	31	4	2	4	21	37	41	19	35	36	
Columbia	Maximum	11	30	24	11	53	50	59	65	40	63	65	51	59	62	30	32	36	51	60	16	19	45	69	65	63	52	42	38	
	Minimum	−4	0	8	0	6	35	34	36	27	31	36	37	34	27	20	21	16	26	12	8	4	16	34	33	26	22	30	33	
Fayette	Maximum	10	26	20	10	48	50	58	65	40	61	64	53	60	61	27	31	36	50	55	13	16	44	66	65	60	50	38	35	
	Minimum	−7	−8	3	−3	1	35	30	31	25	26	35	37	32	20	18	15	11	25	8	4	1	1	30	42	25	19	32	30	
Hannibal	Maximum	10	27	24	8	47	48	58	64	41	61	66	54	55	64	29	29	33	49	57	11	17	44	68	67	60	47	49	38	
	Minimum	−8	−6	3	−9	−2	31	29	35	27	31	37	37	33	28	20	19	11	24	13	5	1	14	35	40	28	21	34	30	
Jefferson City §§	Maximum	13	30	23	23	49	52	62	66	40	63	67	52	62	63	36	32	37	57	65	32	25	46	72	65	66	52	42	50	
	Minimum	−2	−3	0	2	3	23	33	35	29	26	31	39	29	33	20	23	11	19	27	7	1	7	24	34	46	21	22	26	
Kirksville	Maximum	11	25	25	12	45	46	56	50	40	59	63	54	54	57	33	28	33	41	48	15	14	45	62	66	59	48	43	43	
	Minimum	−13	−1	8	−12	−2	31	29	33	18	30	35	31	32	32	16	18	8	21	14	1	−4	10	30	41	29	19	32	29	
Louisiana	Maximum	9	20	20	16	45	45	50	58	60	60	62	62	52	51	48	38	34	40	40	26	18	38	62	64	64	45	45	37	
	Minimum	−4	−15	10	−5	−9	58	27	38	30	28	38	41	28	46	21	28	15	24	26	8	0	12	26	38	36	21	30	34	
Macon §§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
Mexico §§	Maximum	12	30	24	11	48	51	59	65	44	61	67	52	61	63	62	31	35	52	61	22	18	46	70	64	61	50	39	30	
	Minimum	−6	−7	−2	−5	1	11	29	35	28	29	34	37	32	33	19	25	12	14	24	6	1	1	17	40	41	19	33	34	
Oakfield	Maximum	20	27	30	20	49	55	57	62	58	62	71	63	59	70	53	33	35	45	70	27	17	45	73	64	68	50	44	45	
	Minimum	2	5	20	−1	4	42	32	45	29	27	38	39	32	51	22	25	15	23	27	9	3	15	32	46	34	22	34	34	
St. Catharine	Maximum	12	24	23	11	43	49	57	62	38	56	63	55	56	56	35	31	35	42	47	15	17	44	60	65	55	49	44	35	
	Minimum	−15	−8	6	−10	−3	31	29	35	20	28	32	37	31	35	18	20	8	23	14	2	−2	16	27	38	30	18	32	30	
St. Louis (1)	Maximum	16	25	27	15	43	54	51	58	43	60	67	53	56	68	34	35	32	50	70	21	20	41	67	58	66	49	41	42	
	Minimum	7	10	11	2	8	43	39	43	30	29	42	42	38	31	26	22	20	27	18	8	6	20	34	44	32	27	35	34	
Unionville §§	Maximum	8	28	26	8	44	46	55	42	44	60	65	48	46	55	28	26	27	45	48	8	16	47	50	70	56	50	46	34	
	Minimum	−21	−18	−2	−15	−17	5	27	29	16	16	30	34	30	30	15	14	5	4	16	−2	−7	−5	10	30	36	26	27	27	
Warrenton §§	Maximum	17	28	24	13	47	51	51	64	39	60	70	51	59	65	30	32	35	57	65	19	19	45	74	63	63	51	38	39	
	Minimum	−4	0	3	−3	−3	11	32	33	29	28	29	39	32	32	21	21	13	16	25	8	2	2	18	35	45	18	32	34	
Southeast Lowlands.																														
Caruthersville	Maximum	22	30	46	36	52	52	51	70	62	61	68	68	72	78	67	54	47	60	67	63	31	49	52	79	81	57	70	82	
	Minimum	14	20	26	18	17	40	37	46	37	36	36	53	36	55	36	32	32	28	43	22	17	28	30	50	53	27	35	56	
Doniphan	Maximum	23	32	40	45	48	57	58	61	57	57	62	64	63	71	58	45	38	50	72	55	27	47	52	81	85	49	63	80	
	Minimum	10	13	17	11	12	25	27	33	32	20	25	46	30	55	29	31	22	25	47	17	14	23	37	45	45	23	32	40	
Jackson	Maximum	20	30	35	20	38	51	42	60	55	55	61	62	52	76	58	42	40	49	70	52	25	45	58	74	75	55	53	82	
	Minimum	10	2	15	6	0	31	24	37	32	34	27	46	26	54	28	29	20	21	45	16	10	21	28	48	40	23	27	35	
Marble Hill	Maximum	22	30	34	30	30	60	60	60	42	68	63	60	62	70	72	70	48	70	74	68	70	77	55	70	80	55	50	75	
	Minimum	10	5	5	9	5	20	12	33	23	14	19	20	18	38	16	8	17	28	32	15	10	20	30	38	45	22	25	30	
Poplar Bluff §§	Maximum	23	31	45	32	49	57	52	66	43	55	66	65	60	76	43	47	42	59	69	32	27	49	54	79	81	51	63	81	
	Minimum	6	10	14	11	8	9	25	28	36	23	25	31	31	31	29	30	20	21	28	15	....	....	....	....	....	....	....	....	
Ozark Plateau.																														
Birchtree	Maximum	16	32	36	34	44	56	55	63	56	61	67	59	63	70	54	40	41	45	73	42	24	49	70	80	76	49	60	72	
	Minimum	6	2	20	10	12	40	27	41	31	18	28	44	31	53	22	24	16	22	42	16	9	20	27	49	43	19	35	43	
Cassville	Maximum	22	38	35	45	56	60	68	72	82	64	59	56	70	65	54	37	43	52	69	33	26	56	75	79	71	68	70	64	
	Minimum	4	9	19	14	21	42	25	12	21	12	27	44	52	53	18	21	16	28	31	8	11	20	28	50	43	18	35	37	
Eldon	Maximum	22	31	22	18	58	56	65	72	45	63	66	54	65	62	45	34	40	48	64	20	20	40	79	62	67	55	45	39	
	Minimum	−3	0	14	4	8	32	33	40	25	23	30	42	28	33	16	21	11	20	16	2	3	11	34	44	18	18	31	31	
Fruit City	Maximum	21	28	35	32	44	58	59	60	60	67	68	58	62	71	55	40	39	12	70	42	22	48	58	77	76	50	54	75	
	Minimum	5	6	20	9	10	39	29	41	20	30	31	45	32	52	31	34	15	20	12	10	7	18	26	43	44	20	37	39	
Gano	Maximum	19	29	28	22	47	55	59	59	57	57	59	60	57	57	50	33	38	46	70	28	20	47	68	71	71	43	55	55	
	Minimum	1	5	18	5	10	40	42	45	30	24	35	45	28	50	19	23	14	22	28	7	4	18	30	45	57	18	35	36	
Hollister	Maximum	18	20	28	30	36	56	52	64	68	66	62	72	66	62	44	34	42	48	56	42	36	48	56	68	72	76	52	48	
	Minimum	8	12	16	14	18	38	40	24	28	18	32	38	36	38	22	26	18	28	42	8	12	20	24	46	18	28	24	36	
Ironton §§	Maximum	20	25	34	26	45	57	59	59	45	66	68	58	61	72	47	38	37	51	71	41	18	49	64	76	77	51	51	77	
	Minimum	5	−1	20	6	4	15	21	39	31	20	28	42	24	41	22	24	15	17	27	11	6	17	18	36	38	19	31	32	
Koshkonong	Maximum	19	34	40	35	46	59	60	65	61	61	66	63	66	71	55	42	42	....	73	47	25	50	64	85	80	51	64	78	
	Minimum	7	11	23	14	12	40	34	41	32	22	34	45	35	53	24	27	17	....	21	12	11	21	27	43	45	22	35	44	
Lebanon §§	Maximum	20	28	10	28	49	55	52	71	47	60	64	54	62	55	34	35	42	55	62	23	22	48	74	71	69	50	62	59	
	Minimum	−2	1	10	8	10	22	35	38	28	24	35	38	29	33	12	12	13	25	30	6	6	7	19	37	49	19	20	36	
Mountain Grove §§	Maximum	20	34	31	35	49	55	57	67	41	61	58	55	58	64	37	36	55	58	70	26	25	55	67	76	74	56	67	71	
	Minimum	1	4	14	10	14	21	35	38	28	23	29	41	34	38	18	23	18	23	27	7	7	9	25	37	47	20	28	37	
Neosho	Maximum	21	37	37	40	57	60	67	72	65	59	57	58	70	68	54	37	45	52	63	33	30	52	75	76	74	55	70	70	
	Minimum	2	8	15	14	23	41	28	46	27	18	28	44	28	53	18	18	17	26	32	8	23	20	28	57	44	18	33	37	
Rolla §§	Maximum	21	32	27	23	50	56	63	67	38	64	69	54	64	65	40	34	41	57	68	22	23	49	74	68	71	53	54	51	
	Minimum	−2	2	7	3	5	19	30	32	29	25	31	35	30	31	20	20	15	15	28	8	5	6	21	47	47	18	21	36	
Springfield	Maximum	15	33	29	32	55	55	65	71	37	55	58	54	67	63	36	34	41	49	63	20	24	48	72	71	70	49	58	53	
	Minimum	1	11	18	14	23	43	36	33	28	27	38	42	37	31	18	19	17	28	13	7	8	23	35	56	28	24	36	33	
Southwest Plain.																														
Amoret	Maximum	18	32	30	22	52	58	63	69	45	64	60	55	69	63	39	40	43	47	54	18	21	52	71	74	67	51	47	41	
	Minimum	−8	0	14	6	9	38	33	35	21	22	31	41	29	38	20	11	8	28	16	2	3	16	32	46	35	16	37	32	
Appleton City	Maximum	18	36	30	24	55	59	65	70	47	61	58	57	66	64	45	35	43	46	58	20	21	51	67	70	64	50	47	42	
	Minimum	−4	2	15	9	13	32	28	44	25	30	32	44	34	45	11	16	12	29	20	5	6	18	32	50	38	19	37	34	
Clinton	Maximum	15	34	26	23	56	57	67	71	44	63	62	56	62	63	43	34	42	48	60	20	26	49	67	70	65	52	47	43	
	Minimum	−5	3	0	6	12	37	32	40	32	27	34	43	30	43	13	18	12	27	19	5	6	16	29	46	31	19	34	32	
Harrisonville §§	Maximum	13	31	22	23	50	55	65	70	42	68	62	54	67	57	29	31	40	53	59	15	21	51	67	72	68	51	41	36	
	Minimum	−10	−10	2	3	3	22	35	35	22	21	29	35	30	35	15	13	7	13	31	3	3	4	16	38	46	16	21	34	
Lamar §§	Maximum	19	39	34	36	59	60	68	71	47	57	60	45	71	58	34	36	44	60	61	24	28	51	68	75	58	61	68	42	
	Minimum	−2	8	20	13	22	36	32	44	27	24	33	45	33	55	17	16	14	29	50	6	7	19	32	46	61	28	36	38	
Lamonte	Maximum	16	30	25	16	51	52	64	69	42	62	62	54	65	63	35	33	41	48	58	20	18	49	62	69	62	51	41	49	
	Minimum	−9	−6	12	−2	6	36	30	35	24	28	31	41	27	34	18	19	9	25	15	3	3	12	34	45	31	16	34	33	
Marshall	Maximum	9	27	25	14	48	51	61	69	43	61	65	56	61	62	35	31	36	65	54	16	48	47	65	67	64	51	46	38	
	Minimum	−8	−5	11	−2	4	35	32	43	23	28	28	38	29	35	17	18	11	34	16	4	2	12	32	43	33	19	31	32	
Warrensburg	Maximum	15	32	27	16	53	55	65	70	45	66	63	53	66	61	35	31	43	46	54	15	19	51	67	67	61	52	44	38	
	Minimum	−8	2	16	1	7	37	39	35	23	29	34	40	34	35	17	17	10	27	15	4	4	11	34	47	32	23	35	33	
Warsaw	Maximum	16	24	20	22	60	65	68	72	64	63	63	65	70	60	40	30	36	48	65	18	26	55	73	75	68	60	65	50	
	Minimum	−4	−3	7	9	17	28	25	39	29	20	23	25	26	40	15	17	10	21	11	3	5	12	24	31	36	15	27	37	
Northwest Plateau.																														
Chillicothe §§	Maximum	0	12	28	19	25	47	51	59	59	44	65	62	54	59	55	26	30	37	48	33	14	20	60	68	64	52	42	35	
	Minimum	−16	−16	−13	−12	−7	0	23	29	40	19	25	25	39	33	40	16	18	7	25	31	2	−2	3	19	47	16	32	31	
Grant City	Maximum	12	30	25	15	45	50	60	52	40	62	64	59	55	51	25	22	39	47	44	8	15	47	67	65	57	53	47	41	
	Minimum	−20	−8	5	−9	2	23	32	31	14	31	33	35	32	18	14	13	1	25	6	4	−5	10	26	40	29	18	29	27	
Kansas City	Maximum	14	29	28	14	49	57	61	66	44	68	61	52	62	61	26	28	40	50	50	12	20	51	69	68	68	52	43	34	
	Minimum	−9	5	9	2	8	40	44	27	20	31	42	40	39	19	17	14	11	30	8	2	0	20	37	46	28	27	33	31	
Kidder §§	Maximum	11	32	16	16	46	50	61	51	41	65	72	53	58	55	27	32	37	47	49	10	18	48	67	70	54	54	43	34	
	Minimum	−14	−2	11	−6	11	36	38	42	18	34	38	38	33	48	16	17	8	27	46	0	−2	15	33	40	52	22	32	31	
Lexington §§	Maximum	14	30	23	14	50	51	62	70	42	61	64	54	63	56	27	30	37	44	52	13	20	48	64	68	57	50	37	35	
	Minimum	−10	−1	15	1	5	37	35	40	22	31	38	40	31	50	17	17	10	27	42	3	1	14	34	42	50	21	31	34	
Maryville §§	Maximum	11	30	14	18	43	52	64	42	42	65	65	50	59	43	22	17	35	49	23	5	18	49	72	66	45	56	44	31	
	Minimum	−20	−18	11	−7	−8	5	30	34	12	12	30	33	31	31	10	8	0	0	21	−7	−7	−3	9	25	43	17	21	26	
Oregon	Maximum	8	26	26	10	44	49	59	50	40	62	65	53	58	49	21	20	35	49	44	6	19	47	69	64	55	53	43	32	
	Minimum	−17	−1	7	−5	4	31	36	24	12	29	35	38	31	19	11	8	3	27	5	−5	−5	10	29	37	25	18	29	25	
St Joseph	Maximum	12	30	29	13	46	54	63	56	45	68	65	50	60	57	23	23	38	48	47	9	21	50	71	67	57	56	42	33	
	Minimum	−13	2	10	−1	7	38	39	24	17	34	40	37	37	16	15	11	8	30	5	−1	−1	15	36	42	24	22	33	27	
Trenton	Maximum	9	25	25	11	45	45	53	48	39	58	62	55	56	50	30	26	34	45	45	12	18	42	61	61	52	48	44	35	
	Minimum	−15	−5	6	−7	2	32	32	32	18	31	31	37	33	30	17	16	9	19	12	1	−2	11	28	36	30	20	29	28	

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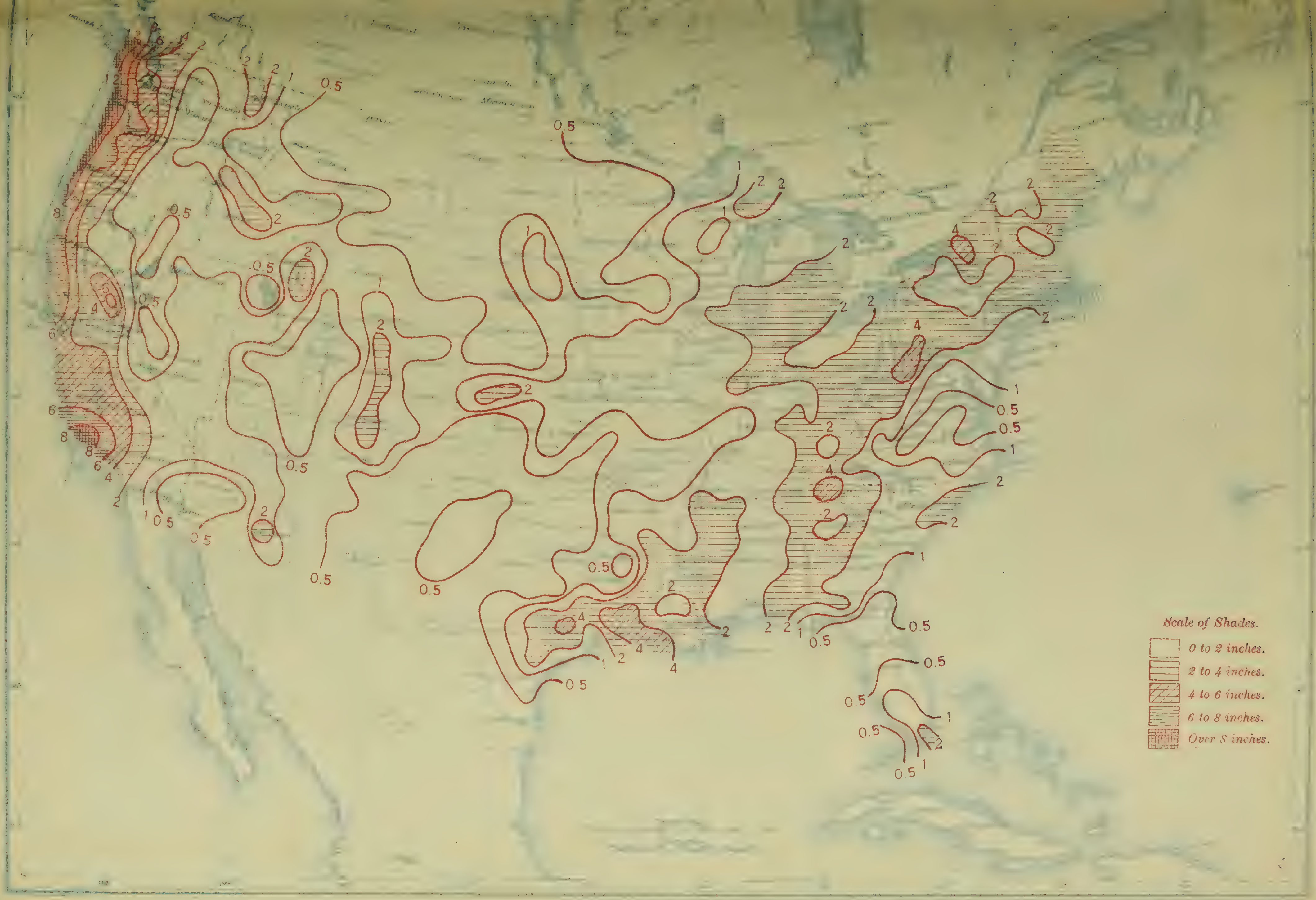
^{a}, ^{b}, ^{c}, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
0.5
1
2
4
6
8

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

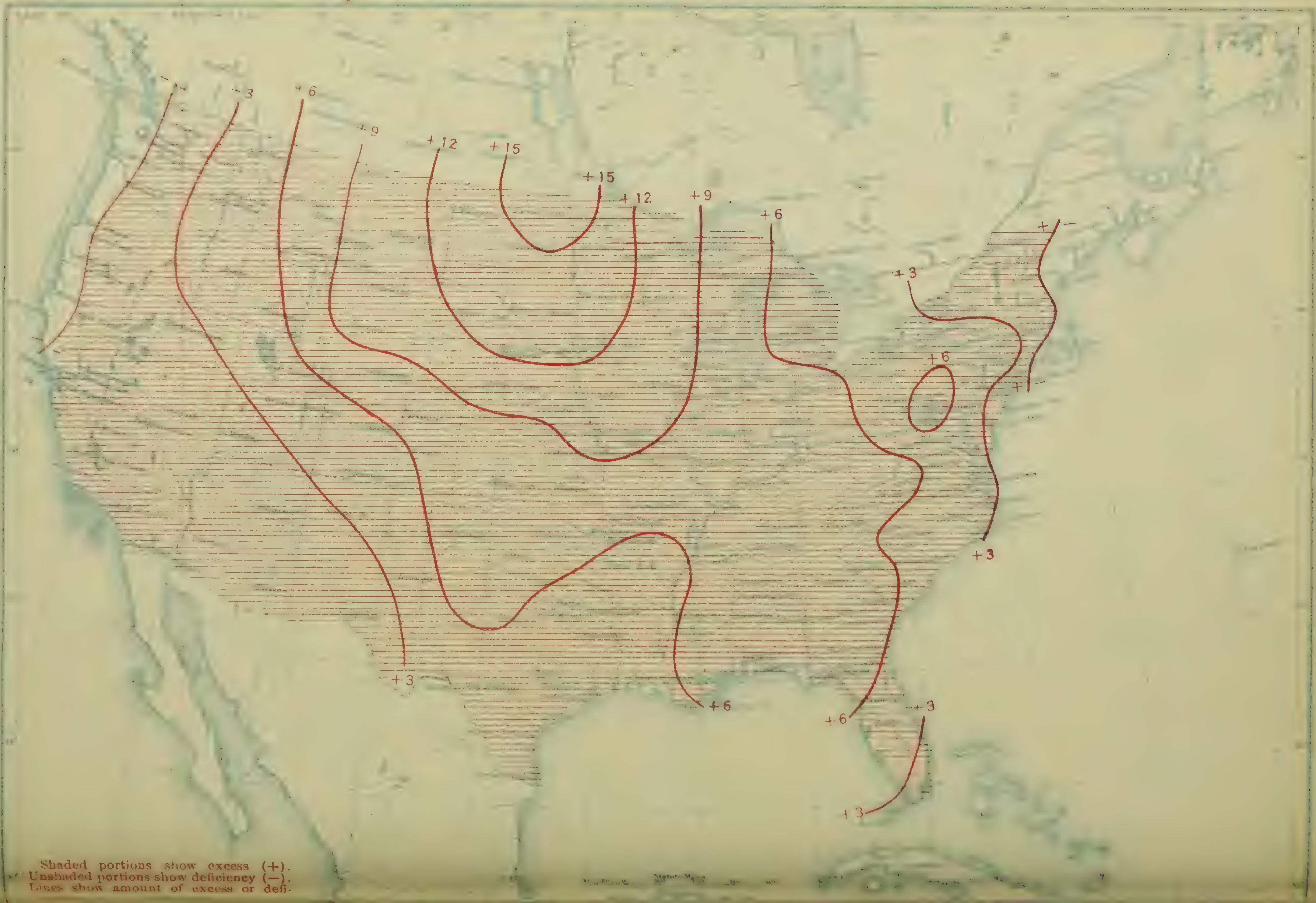
MARCH, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 4, 1918.

Departure of the Mean Temperature from the Normal, March, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (–).
Lines show amount of excess or defi-

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XII. COLUMBIA, MO., MARCH, 1918. No. 3.

GENERAL SUMMARY.

ghout Missouri. March, 1918, was characterized by .t sunshine, moderate temperatures, and deficient pre- : and in these respects it was a close counterpart of the onth in 1910, the warmest March on record.

few exceptions, the condition of wheat and rye was excellent. The soil was in fine condition and much was done. Most of the oats crop had been sown. Ap- s were healthy, but peaches were winter killed. Cattle e winter well.

pring in years started out more promising; but rain ded. Drought conditions have prevailed since last Sep- and subsoil moisture was low.

TEMPERATURE.

monthly mean temperature, as based upon the reports ations, was 50.9°. The mean departure from the normal stations having 10 or more years' records was plus 7.8°. ily mild weather prevailed in all sections, but the temp- xcess in the Ozarks (5.7°) was less marked than in the ivisions. There were only 11 days with temperatures 32- r. Much of the month was more like late summer and umn than spring: six stations experienced temperature r higher on the 13th, the highest being 95°. The first three days, and the 10th, were the only really uncom- cold days of the month.

PRECIPITATION.

verage precipitation, 85 stations reporting, was 0.94 inch. parture from the normal for 76 stations having 10 or ears' record was minus 2.05 inches. This month ranks driest March since 1867, the lack of moisture during the onth in 1885, and again in 1910, being only a little arked. There were four days during the entire month ppreciable precipitation: and the snowfall was the light- years, and this light fall was confined to the northern the State.

EVAPORATION.

total evaporation for the month, at Columbia, Mo., was ches: the total rainfall, 0.64 inch; the total wind move- ver the surface of the pan, 1,728 miles, and the mean ature, 50.9°. During the same month in 1917, these data order named, 3.40 inches: 3.52 inches; 2.517, and 44.40.

WIND.

revaling winds from the south. The average wind move- stations equipped with anemometers reporting, was r nearly normal. A strong wind prevailed on the 9th. damage in some localities, such as turning over small s, blowing away hay stacks, etc.

SUNSHINE AND CLOUDINESS.

onth was an unusually bright one; there were 18 clear days and oudy days. The average number of hours of sunshine, six sta- orting, was 270, 70 per cent of the possible, or 15 per cent above

MISCELLANEOUS PHENOMENA.

Aurora---Exceptionally brilliant, and observed from all parts of the State, on the evening of the 7th.

Fog---3d, and 4th. Hail---13th, and 22d. Halos, solar---1st, 2d, 11th, 16th, 18th, 26th, and 28th. Lunar---5th, and 7th. Sleet---15th, at one station. Thunderstorms---Local, 3d, 4th, 9th, and 13th; more or less general, 22d, 23d, 27th, 28th, and 31st.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity 7 a. m.	Mean relative humidity 7 p. m.	Sunshine. Total hours.	Sunshine. Percentage of possible.	Wind. Total movement, miles.	Wind. Average hourly velocity.	Max. velocity. Miles per hour.	Max. velocity. Direction.	Max. velocity. Date.
Columbia	30.02	71	......	279	75	7,268	9.8	52	sw.	9
Hannibal	30.04	71	......	.	.....	7,926	10.6	58	w.	9
Kansas City	30.01	62	41	278	75	9,394	12.6	58	w.	9
St. Joseph	30.01	76	42	263	71	7,331	9.9	56	nw.	9
St. Louis	30.03	65	47	263	71	10,912	14.7	74	sw.	9
Springfield	30.03	72	51	267	72	8,662	11.6	56	w.	9
Cairo, Ill	30.04	75	52	...	......	7,861	10.6	48	w.	9
Keokuk, Iowa	30.03	70	48	252	68	6,519	8.3	52	sw.	9

COMPARATIVE DATA FOR MARCH.

Year.	Temperature. Mean.	Temperature. Departure.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Mean.	Precipitation. Departure.	Precipitation. Greatest in 24 hours.	Precipitation. Total snowfall, unmelted.	Number of Days. With .01 inch or more.	Number of Days. Clear.	Number of Days. Partly Cloudy.	Number of Days. Cloudy.
1888	38.5	4.8	90	1	4.02	+1.11	...	....	10	.	..	....
1889	44.3	1.0	84	13	1.98	-0.93	....	....	5	....	....	....
1890	37.3	-6.0	76	11	2.61	-0.30	....	5.7	8	...	.	....
1891	36.6	-6.7	78	11	3.01	0.10	...	7.1	10	.	....	....
1892	38.9	-1.4	87	5	3.11	-0.20	....	...	8	8	10	13
1893	40.5	-2.8	86	1	2.86	0.05	2.15	3.2	7	11	10	10
1894	47.7	4.4	89	2	2.93	+0.02	3.20	0.2	6	15	9	7
1895	42.1	0.9	98	0	2.11	-0.77	3.00	4.4	9	14	7	10
1896	39.2	3.9	82	2	2.05	0.88	4.47	5.2	8	11	9	11
1897	44.2	+0.9	93	— 5	6.07	+3.16	4.10	1.0	12	9	9	13
1898	44.7	-1.4	83	9	7.09	+4.18	3.87	0.6	11	11	7	13
1899	37.1	-4.1	78	— 8	2.93	+0.02	4.30	8.9	6	9	11	11
1900	40.4	—1.9	88	— 4	1.48	-1.43	3.41	0.2	6	15	9	7
1901	42.7	-0.6	85	— 1	3.74	+0.83	3.21	1.8	8	11	8	12
1902	45.3	+2.0	85	1	3.49	+0.58	5.60	0.8	9	10	10	11
1903	46.8	+3.5	81	9	3.35	+0.44	6.19	1.1	8	13	7	11
1904	44.8	+1.5	87	8	4.14	+1.23	7.50	1.2	9	11	9	11
1905	50.3	+7.0	88	10	2.99	+0.08	2.67	T.	8	11	8	12
1906	34.6	-8.7	75	— 5	3.93	+1.02	3.00	8.6	11	6	7	18
1907	53.9	+10.6	95	16	2.82	-0.09	3.08	1.0	7	14	7	10
1908	50.1	+6.8	89	14	2.58	—0.33	2.55	1.0	7	14	7	10
1909	44.5	+1.2	81	9	3.07	+0.16	3.30	0.6	6	13	9	9
1910	55.8	+12.5	96	15	0.66	-2.25	2.25	0.1	2	20	7	4
1911	46.8	+3.5	91	5	1.85	—1.06	2.00	1.4	6	16	8	7
1912	35.2	8.1	89	— 4	4.62	+1.71	2.85	16.5	11	12	6	13
1913	40.6	-3.7	84	—12	4.36	+1.31	7.97	5.0	9	12	8	11
1914	43.2	-1.3	87	— 2	2.75	-0.41	3.01	4.7	8	13	7	11
1915	36.4	—8.1	70	6	1.50	-1.74	1.85	7.9	6	7	8	16
1916	47.0	+1.3	95	— 2	2.53	-0.65	4.25	3.1	7	14	8	9
1917	45.2	+1.7	86	— 7	2.91	—0.42	4.08	1.5	7	15	7	9
1918	50.9	+7.8	95	8	0.94	-2.05	2.25	0.1	4	18	6	7

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Precipitation, in inches. Departure from the normal.	Precipitation, in inches. Greatest in 24 hours.	Precipitation, in inches. Total snowfall, unmelted.	No. of days. With precip. .01 inch or more.	No. of days. Clear.	No. of days. Partly cloudy.	No. of days. Cloudy.	Prevailing direction of wind.	Observers.
Arlington	15	1.10	-1.84	0.80	0.0	2	24	2	5	....	Wm. R. Bennett.
Boonville	41	0.77	-2.26	0.34	0.0	4	20	3	8	sw.	C. Randecker.
C. Girardeau	11	1.35	-1.94	0.90	0.0	5	12	5	14	e.	D. L. Albert.
Glencoe	1	...	......	....	......	..	..	..	..	......	Vint R. Neel.
Hermann	44	0.32	-2.68	0.22	0.0	6	15	4	12	e.	C. T. Maushund.
New Madrid	24	1.31	-4.03	1.04	0.0	5	17	0	14	ne.	Miss Josie Smith.
Osceola	18	1.29	-1.77	0.65	0.0	3	19	2	8	......	Wm. E. Mathews.
Pacific	1	0.48	....	0.24	0.0	4	16	6	9	......	R. C. Dougherty.
Steelville	16	1.00	-0.99	0.33	0.0	5	22	0	9	s.	Wm. J. Drennen.
Tuscumbia	1	0.85	....	0.45	0.0	2	23	1	7	sw.	C. B. Wright.
Union	1	0.67	....	0.30	0.0	5	17	4	10	sw.	J. Wm. Keller.
Valley Park	1	0.75	....	0.25	0.0	5	18	2	11	nw.	H. J. Lucksinger.
Waverly	3	0.67	....	0.48	0.0	4	21	3	7	sw.	J. W. Cauthorn.

Climatological data for March, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With 0.01 or more precipitation.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Brunswick	Chariton	650	37	50.8	+9.7	88	13	26	1	41	0.68	−1.80	0.40	0	3	21	0	10	sw.	[illegible]
Clifton Hill	Randolph	731		51.2	+10.6	88	13	16	10	48	1.17	−1.55	0.64	0	4	20	9	2		[illegible]
Columbia	Boone	784	27	50.9	+9.5	90	13	19	10	48	0.64	−2.54	0.33	0	3	16	8	7	s.	[illegible]
Fayette	Howard	725	32	49.1	+7.4	88	13	17	16	35	0.62	−2.[illegible]	0.37	0	2					[illegible]
Fulton	Callaway	818	13	50.6	+6.8	89	13	18	10	48	0.85	−2.06	0.40	0	5	21	4	6	sw.	Dr. O. [illegible]
Gorin	Scotland	[illegible]	28								0.35	−2.70	0.12	0	4	14	9	8	s.	[illegible]
Hannibal	Marion	534	24	49.1	+7.5	89	13	18	10	52	1.10	−1.16	0.50	T.	6	16	10	5	sw.	[illegible]
Jefferson City	Cole	557	31	51.2	+8.4	85	13	19	10	49	0.58	−2.18	0.30	0	3	23	4	4	s.	Miss [illegible]
Keytesville	Chariton	660	4								0.84		0.54	T.	3					[illegible]
Kirksville	Adair	969	25	48.4	+9.8	84	13	14	10	44	0.51	−2.20	0.37	T.	3	11	18	2	s.	Prof. Mark
Louisiana	Pike	469	39	49.0	+6.7	84	14	18	10	49	1.10	−1.57	0.35	T.	5	25	1	5	e.	[illegible]
Macon	Macon	875	19	48.0	+5.8	89	13	11	10	47	0.02	−2.50	0.02	0	1	21	7	3	sw.	Chas. N. T
Mexico††	Audrain	797	39	48.6	+7.3	90	13	16	10	43	0.56	−2.11	0.26	0	3	19	0	12	s.	R. M. [illegible]
Oakfield	Franklin	793	36	52.3	+7.8	88	13	18	10	45	0.28	−3.62	0.22	0	3	13	14	4	s.	[illegible]
Palmyra	Marion	652	5	46.6	+7.2	87	13	11	10	50	0.32	−2.59	0.17	0	4	19	1	11	sw.	W. B. [illegible]
St. Catherine	Linn	850	4	48.6		84	13	15	10	43	0.25		0.10	T	4	20	9	2	sw.	L. D. [illegible]
St. Charles	St. Charles	456	59	52.8	+9.3	87	13	20	10	45	T	−3.14	T	0	0	17	8	6	s.	[illegible]
St. Louis (1)	St. Louis City	717	46	52.6	+9.1	84	13	22	10	49	0.67	−2.76	0.37	0	4	15	11	5	sw.	U. S. [illegible]
St. Louis (2)	...do.	578	5	52.0		85	13	21	10	39	0.72		0.28	T.	8	16	10	5	s.	St. [illegible]
Shelbina	Shelby	779	25								0.99	−1.63	0.95	0	2					S. C. Parsons
Steffenville	Lewis	650	21	49.4	+8.0	88	13	11	10	47	T	−2.82	T	T	0	13	13	5	sw.	[illegible]
Unionville	Putnam	1,072	21	45.3	+7.9	85	13	10	1	48	0.59	−1.72	0.29	2.5	4	23	4^a	3	s.	Geo. W. [illegible]
Warrenton	Warren	865	26	50.4	+8.9	90	13	18	10	46	0.31	−2.98	0.25	0	4	12	9	8	sw.	Prof. J. H.
Keokuk, Iowa	Lee, Ia.	574	46	47.5	+9.6	83	13	17	10	51	0.16	−2.21	0.07	T.	5	15	10	6	sw.	U. S. Weather
Section means and extremes				49.7	+8.3	90	13	10	1	52	0.56	−2.26	0.95	0.1	3	18	8	5	sw.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	58.6	+7.9	87	22	30	10^1	41	1.24	−2.68	0.33	0	4	17	7	7	e.	H. I. Averill.
Doniphan	Ripley	344	12	55.0	+5.8	82	22	25	11^1	43	0.16	−3.10	0.25	0	3	14	5	12	s.	W. W. Martin.
Jackson	Cape Girardeau	458	26	54.0	+7.2	86	22	23	11^1	50	0.91	−3.46	0.50	0	5	10	18	3	s.	J. M. Bean
Marble Hill	Bollinger	420	25	56.8	+10.0	95	30	23	17	54	0.47	−3.98	0.30	0	2	23	2	6	s.	D. A. F. He
Patton (near)	Bollinger	500	2								0.7		0.50	0	2					[illegible]
Poplar Bluff	Butler	339	13	55.5^1	+7.1	84	22	26^1	17		0.55	−4.30	0.28	0	4	10^a	6^a	14^a		Miss Belle K
Cairo, Ill.	Alexander, Ill.	359	44	55.8	+6.8	81	22	27	10	38	1.56	−2.46	1.30	0	5	7	8	16	sw.	U. S. Weather
Section means and extremes				55.6	+7.5	95	30	23	11^1	54	0.84	−3.33	1.30	0	4	13	8	10	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	23	51.8	+4.6	83	5^1	21	10	41	0.45	−4.08	0.25	0	3	23	4	4	s.	V. H. Kirke
Bolivar	Polk	1,071	29	52.4	+6.8	78	20^1	19	10	43	3.03	−0.06	1.20	0	5	23	3	5	s.	A. C. [illegible]
Cassville	Barry	1,500	6	54.2		84	13	23	10	51	1.56	−2.38	0.74	0	3	21	6	4	s.	[illegible]
Crocker ††	Pulaski	1,126	6								3.28	−1.27	0.92	0	2					Roy W. Reed.
Dean	McDonald	1,000	18	51.4^c	+2.8	83	13	20	10	47	3.77	+0.33	1.53	0	6	19	2	10	e.	H. L. Dean.
Eldon	Miller	931	16	49.9	+6.9	88	13	16	10	52	0.38	−2.73	0.18	0	3	14	14	3	s.	E. H. Shepher
Fruit City	Reynolds	1,150	4	53.4		83	5^1	20	10	55	1.19	−1.71	1.10	0	2	14	11	6	s.	R. C. Watson.
Gano	Dent	1,250	13	52.4	+5.7	85	13	18	10	46	1.17	−2.26	0.56	0	5	23	5	3	s.	A. C. Leach.
Goodland	Iron	1,000	12	50.8	+6.2	83	13	20	10^1	51	1.49	−2.90	0.90	0	4	17	11	3	s.	F. M. Adams.
Hollister	Taney	735	8	49.0	+0.6	84	28	24	9	44	3.80	+0.63	2.00	0	1	16	0	15	nw.	W. P. [illegible]
Houston	Texas	1,280	24	54.2	+8.1	82	5	21	10	48	2.02	−2.31	1.05	0	5	17	8	6	se.	R. F. Harmon
Ironton	Iron	925	39	50.8	+6.2	83	5^1	19	16	50	3.3	−0.76	2.25	0	6	5	24	2	ne.	W. H. Delano
Koshkonong††	Oregon	958	16	54.0^f	+4.6^f						0.57	−3.33	0.18	0	5	9^f	9^f	7^f	sw.	R. M. Hitt
Lebanon	Laclede	1,265	28	51.2	+6.0	87	8	19	10	59	1.15	−2.43	0.80	0	3	27	3	1	s.	Leonard E. D
Lockwood	Dade	1,078	22	52.4^a	+5.3	81	20	20	10	43	2.09	−0.27	0.76	0	6	13	5	13	se.	C. S. Crow.
Mountain Grove	Wright	1,490	18	51.5	+5.4	83	13	19	10	43	1.65	−2.90	0.82	0	3	11	15	5	s.	Mo. Fruit Ext
Mount Vernon	Lawrence	1,480	38																	C. L. [illegible]
Neosho	Newton	1,011	34	53.5	+5.8	83	13	21	16	47	3.28	−0.23	0.90	0	8	20	5	6	sw.	W. O. [illegible]
Rolla	Phelps	1,139	35	51.4	+7.1	87	13	19	10	47	1.00	−2.45	0.43	0	3	23	6	2	e.	Prof. [illegible]
Springfield	Greene	1,350	29	52.6	+9.1	82	13	22	10	43	1.33	−2.74	0.53	0	9	21	6	4	s	U. S. Weather
Section means and extremes				51.9	+5.7	88	13	16	10	59	1.89	−1.69	2.25	0	4	18	8	5	s.	
Southwest Plain.																				
Amoret	Bates	831	8	51.8	+9.5	95	13	21	7	47	1.31	−1.24	0.53	0	5	17	5	9	sw.	Darby Fruit F.
Appleton City	St. Clair	853	26	53.1	+9.2	88	13	20	10	43	0.83	−2.31	0.40	0	4	20	7	4	sw.	W. G. Bigelow
Clinton	Henry	765	30	52.2^c	+8.9	89	13	20	10	44	1.31	−1.53	0.56	0	3	15^c	8	5	sw.	A. L. Derwent.
Harrisonville	Cass	912	44	49.3	+8.8	79	21	18	10	56	1.46	−1.19	0.63	0	5	10	6	15	sw.	A. J. Sharp.
Lamar	Barton	980	36	52.8	+7.1	84	13	21	10	44	2.00	−0.94	0.90	0	4	24	2	5	s.	Joe W. Spring
Lamonte	Pettis	863	28	50.4	+7.3	88	13	19	10	42	0.61	−1.91	0.55	0	2	20	8	3	sw.	J. Ed. Hall.
Marshall	Saline	779	26	50.7	+8.9	89	13	18	10	51	1.21	−1.44	0.55	T.	4	11	14	6	sw.	Dr. W. H. Blac
Warrensburg	Johnson	883	38	52.6	+9.5	89	13	19	10	44	1.15	−1.38	0.72	0	2	19	9	3	sw.	Geo. H. Collins
Warsaw	Benton	715	12	53.7	+7.5	92	13	18	10	56	1.25	−1.85	0.52	0	3	18	11	2	se.	J. R. Smith, M
Section means and extremes				51.8	+8.5	95	13	18	10	56	1.24	−1.53	0.90	0	4	17	8	6	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	49.6	+8.3	86	13	17	10	42	0.35	−2.53	0.35	0	1	22	8	1	sw.	F. G. Ashbaug
Bethany	Harrison	916	27	47.9	+9.0	82	13	8	1	49	0.32	−1.87	0.12	0.1	3	20	3	8	sw.	M. H. Moulton
Chillicothe	Livingston	768	1	49.2	+8.8	87	13	15	10	51	0.40	−2.07	0.40	0	1	19	7	5	sw.	Dr. J. R. Cam
Conception	Nodaway	982	32	49.0	+10.6	83	13	8	10	47	0.38	−1.32	0.27	0.5	3	8	7	6	nw.	Fr. Adelhelm
Gallatin	Daviess	803	17								0.38	−2.25	0.23	0.5	3	21	4	6	sw.	Robert R. Wy
Grant City	Worth	1,134	24	48.4	+8.5	82	13	13	10	42	0.49	−1.46	0.20	T.	3	22	1	8	sw.	W. H. Campb
Kansas City	Jackson	963	28	50.8	+10.0	82	13	19	10	44	0.48	−2.34	0.45	T.	5	18	10	3	s.	U. S. Weather
Kidder	Caldwell	1,020	26	50.4	+10.0	85	13	18	10	41	0.32	−1.91	0.32	0	1	24	1	6	sw.	J. F. Sharp
Lexington	Lafayette	688	35	51.1	+8.7	86	13	19	10	36	0.53	−1.78	0.48	0	3	20	0	11	s.	J. W. Keithley
Liberty	Clay	861	28	52.2	+10.1	84	13	16	10	46	0.82	−1.73	0.32	T.	3	19	10	2	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	45.4	+9.1	82	13	12	11	49	0.17	−1.72	0.17	0	1	24	1	6	s.	J. R. Brink.
Oregon	Holt	1,048	63	46.7	+7.8	80	13	13	10	38	0.14	−1.89	0.13	0	2	17	9	5	nw.	Tom Curry.
St. Joseph	Buchanan	967	45	49.7		84	13	17	10	43	0.34	−1.67	0.33	0.1	2	13	12	6	sw	U. S. Weather
Tarkio	Atchison	976	5	47.2	+8.4	81	18	11	1	43	0.04	−1.68	0.04	0.2	1	19	5	7	sw.	John F. Fraz
Trenton	Grundy	822	22	47.9	+7.7	83	13	17	10	39	0.20	−2.04	0.14	T.	3	21	3	7	s.	W. H. Estes.
Section means and extremes				48.2	+9.0	87	13	8	1†	51	0.36	−1.88	0.48	0.2	2	20	5	6	sw.	
State means and extremes				50.9	+7.8	95	13†	8	1†	59	0.94	−2.05	2.25	0.1	4	18	6	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete used in determining section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. [illegible] Received too late to be included in means and summaries. ††Post-office addresses of these stations are as follows: of Oakfield, Pac No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for March, 1918.

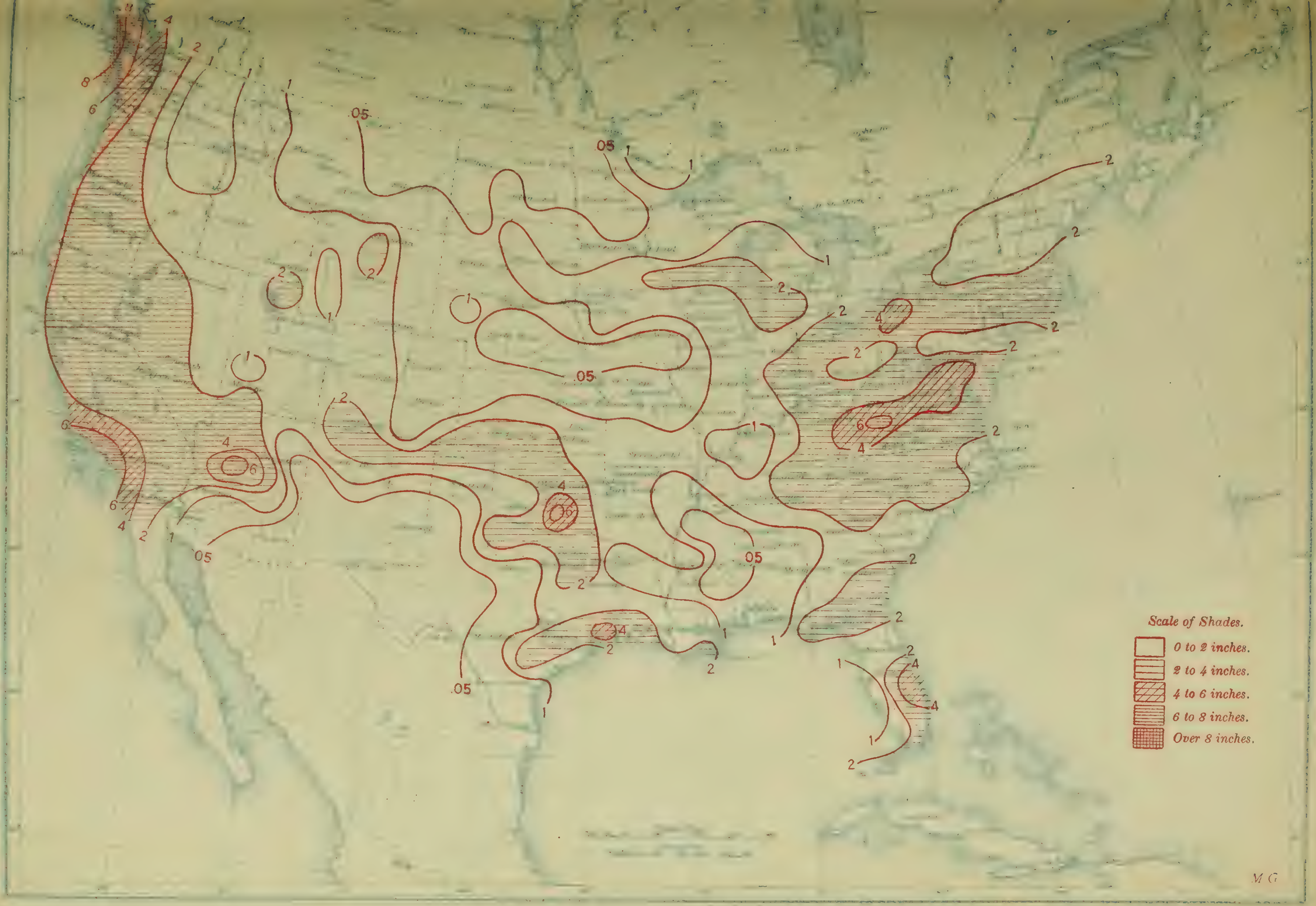
Stations.	Watersheds.	Day of month																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Plain.																																	
	Missouri	.05			.34																			.12	.26								0.77
	Grand			.40											.10										.18								0.68
Hill	Chariton			.10	.18																			.64								.25	1.17
	Missouri			.29			T.								T.								.04	.31			T						0.64
	do			.35																				.27									0.62
	do			.27	.40										.01								.05	.12									0.85
	Meramec																																
	Mississippi			.06					.09						.10								.12										0.37
	do			.16						.20					.01								.12	.50								.11	1.10
	Missouri	.01		.22	.01		T		.02							T							.03	.03	T								0.32
	do				.25																			.30	.03								0.58
	Chariton			.28											.02									.54									0.84
	Mississippi			T.	.08										.06								.37										0.51
	do	T.			.35					.06				.30	T.								.04	.35									1.10
	Chariton	.02																															0.02
	Mississippi													T.	.18									.12	.26								0.56
	Meramec			.02	.22									T.										.04				T.					0.28
	do	.24			.20	.03		T.		.01						T								T.	T.								0.48
	Mississippi	.04		.17						.08						.03																	0.32
	Grand			.10	.09					.03					T.								T	.03									0.25
	Missouri						T.							T.										T.								T	T
	Mississippi			.28	.09		T.			T.				T.	T.									.24				T				.06	0.67
	do			.28	.12		.01			.02				.01	.01								T.	.21				T.				.06	0.72
	do			.95										T.	T.																	.04	0.99
	do													T.	T																	T	T
	Meramec	.20			.30	.02																		.10				.05					0.67
	Grand				.15					.15					.04	.25							T										0.59
Pack	Meramec	.33		.01	.25	.05		T.		T.						T.								.04	T				.07				0.75
	Mississippi	.01			.25	.02	T.			.03													T.	T	T								0.31
Iowa**	do			.05			T.			.02				.07	.01								.01	T								T.	0.16
lands.																																	
rardeau	Mississippi	.05			.05																			.30	.90				.05				1.35
	do	.30			.30		T		T												T			.31	.33			T	T.				1.24
	Black	.25					T.																	.13	.08			T.	T				0.46
	Mississippi	.04			.10																			.50	.20			.07					0.91
	do																							.17						.30			0.47
	do	.10			.15																			.01	1.04			.01					1.31
	do																	.50	.20														0.70
	Black	.11			.07			T.			T.											T.		.09	.28				T.				0.55
	Mississippi	.08		T.	.10		T.			T.				T.							T.		T.	.89	.47			.02					1.56
[illegible]																																	
	Gasconade	T.			.80																			.30								T.	1.10
	Black	.13		.07																				.25									0.45
	Osage			.60			.53																1.20	.60					.10				3.03
	White			.74																				.21					.61				1.56
	Gasconade			.36	.92																												1.28
	Neosho		.65	.54	.07																			.62			T.		.36	1.53			3.77
	Osage			.18	.04																			.16									0.38
City	Black			.09																					1.10								1.19
	Meramec	.56		.10	.10		T.								.11									.30	T			T.				T.	1.17
	Black			.90																				.50	.04			.05					1.49
	White			1.00	2.00					1.00												.80											3.80
	Gasconade	.51		.14	.15		T.																	1.05				T.	.17			T.	2.02
	Mississippi	.60			.18		T																	2.25				.03	.10	.15			3.31
	Black	.18			.15																		.05	.08	.11								0.57
	Osage				.80		T.																.05	.30						T.			1.15
	do			.36	.28																	.26	.76						.30	.13			2.09
	White	.42			.41			T.						T.										.82	T.			T.					1.65
	Neosho																																
	do		.05	.53	.03		T.																.77	.90			T.		.43	.53	.04		3.28
	Meramec	.32			.43		T.																	.25				T.					1.00
	White		T.	.53	.04		.04						.06										.48	.06					.10	.01	.01		1.33
	Meramec	.30			.25			T.							.07									.33	.05								1.00
abria	Osage				.40																			.45									0.85
Plain.																																	
	Osage		.05	.33																				.53					.35	.05			1.31
	do		T.	.40	.15		T.																T.	.14					.14	T			0.83
	do			.45	.56																			.30									1.31
	do	.01			.52																			.15	.63					.15			1.46
	Neosho				.90		T.																.12	.58					.40				2.00
	Missouri			.06																				.55									0.61
	do			.32	.05										T.							T.		.55					T.			.29	1.21
	Osage				.65																			.39						.25			1.29
	Missouri			.43																				.72									1.15
	Osage			.52	.28	T.																		.45					T.				1.25
	Missouri	.02			.48			T.								T.								.08	.09								0.67
Plateau.																																	
	Grand			.35																													0.35
	do			.10	.12					T.					.10																		0.32
	do				.40																												0.40
	Missouri			.27	[illegible]					T.				T.	.05														T.				0.38
	Grand			.23						T					.10																		0.33
	do	.20		.11	.18					T.		T.				T.																	0.49
as City**	Missouri			.43	.02	T.									.01									.01					.01			T.	0.48
	Grand				.32																												0.32
	Missouri	.04			.48											.01																	0.53
	do	.32		.30											T.									.20									0.82
	do				.17											T.																	0.17
	do				.13										.01														T				0.14
seph**	do			[illegible]	T.	T.								T.	.01						T.		T.						T.				0.34
	do			T.											.04																		0.04
	Grand					T.			.02						.04																		0.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. *Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. egular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate w fall not recorded.

Daily temperatures for March, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	51	56	51	61	71	[illegible]	53	67	71	47	63	77	88	50	55	58	78	78	74	75	81	61	47	46	73	[illegible]	65	63	58	75
	Minimum	26	27	34	42	41	38	28	28	41	28	28	37	48	40	32	31	32	37	[illegible]	35	14	48	41	29	32	42	[illegible]	39	42	32
Columbia	Maximum	[illegible]	58	51	61	76	42	53	65	73	47	65	[illegible]	90	61	50	56	73	76	72	74	[illegible]	62	42	[illegible]	[illegible]	[illegible]	63	[illegible]	66	72
	Minimum	26	31	46	40	42	25	22	31	25	19	32	[illegible]	61	55	29	29	37	45	[illegible]	42	[illegible]	42	[illegible]	42	34	45	40	34	40	34
Fayette	Maximum	48	57	51	59	72	36	40	65	71	46	61	[illegible]	88	55	45	56	75	77	73	73	70	60	40	58	50	57	65	61	66	71
	Minimum	21	29	35	40	35	24	20	30	21	17	31	17	55	55	29	27	32	45	45	40	[illegible]	40	36	30	35	42	37	42	41	39
Hannibal	Maximum	49	60	53	63	69	39	51	60	71	42	64	72	79	52	47	55	75	77	72	73	73	60	41	57	58	75	58	72	62	71
	Minimum	25	32	31	58	33	27	22	28	22	18	31	19	52	55	31	25	36	42	48	44	[illegible]	41	38	31	35	32	36	36	36	32
Jefferson City §§	Maximum	52	63	50	64	81	52	55	66	75	48	61	72	89	47	52	[illegible]	74	78	72	75	81	70	49	58	71	78	76	65	68	75
	Minimum	30	29	36	37	41	31	20	25	38	19	22	53	51	41	[illegible]	26	35	42	45	42	46	30	38	[illegible]	[illegible]	40	42	44	42	45
Kirksville	Maximum	47	58	51	60	70	43	50	58	68	43	62	59	84	62	48	56	72	77	72	74	76	67	45	[illegible]	[illegible]	72	57	62	65	75
	Minimum	20	32	31	39	39	21	17	35	24	17	28	46	52	30	22	24	40	42	32	42	43	40	35	28	51	45	30	[illegible]	32	33
Louisiana	Maximum	47	62	57	59	65	65	56	57	71	40	62	70	85	84	45	53	75	72	77	75	75	[illegible]	48	[illegible]	65	65	66	70	52	[illegible]
	Minimum	27	27	36	34	29	32	29	[illegible]	30	18	30	40	51	35	31	21	28	47	48	[illegible]	45	48	38	25	[illegible]	38	34	[illegible]	37	38
Macon §§	Maximum	51	52	63	62	71	39	51	65	71	42	65	75	89	43	52	58	[illegible]	80	[illegible]	76	80	[illegible]	43	61	73	77	64	[illegible]	[illegible]	73
	Minimum	21	22	23	33	41	26	20	21	26	11	18	31	47	40	27	27	32	37	43	44	46	40	35	26	37	42	43	35	35	37
Mexico §§	Maximum	52	62	52	64	77	37	53	65	71	45	64	76	90	45	49	58	75	79	[illegible]	76	[illegible]	[illegible]	49	58	72	78	72	64	[illegible]	74
	Minimum	24	24	31	35	40	30	20	28	31	16	25	35	48	44	22	25	30	41	45	40	42	[illegible]	36	30	[illegible]	35	[illegible]	37	[illegible]	39
Oakfield	Maximum	50	63	52	62	85	66	55	63	58	44	66	75	88	78	44	[illegible]	72	78	72	[illegible]	79	78	70	74	70	78	[illegible]	[illegible]	65	72
	Minimum	29	31	31	38	45	31	22	33	38	18	28	34	63	31	33	27	33	35	18	45	52	46	37	37	35	45	[illegible]	41	37	41
St. Catharine	Maximum	45	59	52	58	70	45	49	61	67	43	60	70	81	75	59	[illegible]	73	76	72	[illegible]	77	[illegible]	54	60	71	73	59	63	64	68
	Minimum	20	30	33	40	40	25	19	27	27	15	30	41	57	32	28	[illegible]	[illegible]	35	39	42	47	48	35	28	32	43	32	35	36	33
St. Louis (1)	Maximum	45	60	48	60	82	52	50	60	76	41	63	73	84	76	48	[illegible]	63	76	72	75	78	[illegible]	46	56	68	76	56	61	64	64
	Minimum	32	36	41	42	50	31	29	41	27	22	31	56	65	35	32	32	58	51	55	[illegible]	[illegible]	41	39	39	47	47	[illegible]	41	[illegible]	47
Unionville §§	Maximum	46	50	54	60	61	30	50	66	52	46	60	72	85	43	50	[illegible]	72	78	76	[illegible]	78	50	55	64	72	70	60	[illegible]	65	70
	Minimum	40	30	29	30	36	22	16	16	30	12	12	30	46	35	26	24	[illegible]	30	30	42	44	40	34	24	26	34	38	29	30	33
Warrenton §§	Maximum	52	65	46	63	83	58	55	66	77	45	65	76	90	56	45	56	[illegible]	72	71	[illegible]	82	67	44	59	[illegible]	79	59	42	[illegible]	75
	Minimum	29	29	35	37	39	32	20	22	34	18	19	30	51	40	28	26	[illegible]	48	48	[illegible]	47	[illegible]	39	33	35	41	38	39	35	37
Southeast Lowlands.																															
Caruthersville	Maximum	70	70	71	74	81	72	51	69	78	70	70	72	84	78	62	60	[illegible]	77	68	67	83	87	73	57	[illegible]	79	[illegible]	76	78	80
	Minimum	39	34	45	48	50	43	34	33	55	30	53	56	65	52	34	33	[illegible]	36	45	50	[illegible]	[illegible]	54	45	38	41	55	49	46	46
Doniphan	Maximum	52	62	63	72	80	73	52	63	75	59	68	73	80	78	54	56	67	72	68	72	73	82	73	58	70	76	78	66	70	74
	Minimum	38	27	43	40	31	55	29	29	55	27	25	55	60	47	35	29	25	31	40	[illegible]	33	56	52	41	34	39	35	48	[illegible]	64
Jackson	Maximum	51	70	54	71	83	72	56	67	81	50	69	70	83	85	51	58	74	77	77	77	82	86	75	56	71	77	72	68	72	78
	Minimum	34	25	31	34	35	35	28	25	49	40	23	55	62	42	30	26	25	27	41	40	32	52	48	40	30	33	50	44	39	34
Marble Hill	Maximum	60	70	55	70	82	85	55	68	85	75	80	85	85	90	55	58	68	71	78	83	85	82	65	55	72	78	70	70	94	95
	Minimum	28	31	38	35	38	35	29	25	35	25	30	35	45	42	29	29	23	24	41	59	68	70	48	40	32	32	50	44	40	42
Poplar Bluff §§	Maximum	56	61	81	72	82	54	55	67	76	50	67	70	80	67	58	59	69	75	74	72	80	84	72	53	73	76	74	65	[illegible]	76
	Minimum	....	...	...									..	56	63	31	29	26	[illegible]	[illegible]	[illegible]	12	17	51	41	36	38	46	46	43	42
Ozark Plateau.																															
Birchtree	Maximum	53	64	59	68	83	73	55	57	76	50	62	75	83	75	51	50	..	68	61	[illegible]	71	78	81	66	71	77	77	72	68	71
	Minimum	33	28	39	41	45	32	23	32	50	21	28	51	62	43	[illegible]	26	...	28	37	[illegible]	38	47	56	44	32	41	51	46	46	45
Cassville	Maximum	49	58	53	70	81	74	53	70	70	55	66	79	84	76	52	55	[illegible]	71	69	[illegible]	80	82	78	65	71	77	82	77	61	73
	Minimum	32	26	45	43	46	25	25	27	46	22	38	52	67	43	28	[illegible]	[illegible]	27	31	[illegible]	41	49	46	39	29	35	50	52	47	46
Eldon	Maximum	51	67	52	64	80	62	55	68	73	58	66	79	88	71	51	[illegible]	[illegible]	[illegible]	72	[illegible]	82	73	47	77	72	77	68	[illegible]	68	74
	Minimum	27	34	41	38	42	18	19	24	30	16	26	43	36	25	24	24	[illegible]	41	38	37	46	40	32	39	34	37	42	42	34	33
Fruit City	Maximum	50	64	56	80	83	74	73	60	71	75	61	72	81	75	51	55	69	72	68	75	77	80	70	57	65	71	72	[illegible]	68	68
	Minimum	32	30	42	40	45	32	[illegible]	30	22	20	26	52	62	40	38	27	33	40	45	42	46	50	41	[illegible]	37	37	57	45	43	44
Gano	Maximum	48	61	54	61	83	77	58	60	67	43	63	76	85	75	58	54	[illegible]	73	70	75	70	86	67	56	[illegible]	[illegible]	76	63	66	75
	Minimum	30	29	50	39	49	28	21	28	40	18	30	52	62	58	26	25	35	43	41	39	47	42	[illegible]	35	37	43	42	42	42	38
Hollister.	Maximum	62	66	62	51	60	52	55	62	60	48	66	62	54	68	56	58	48	68	56	58	62	64	66	68	64	72	70	84	72	70
	Minimum	42	28	36	36	32	28	20	32	24	26	38	40	38	36	34	30	28	30	56	38	30	34	38	39	58	34	36	40	42	40
Ironton §§	Maximum	55	66	52	65	83	45	56	63	77	49	65	73	83	70	51	54	70	74	71	74	78	83	65	57	70	75	63	63	65	73
	Minimum	33	23	36	38	33	43	23	24	40	20	23	35	59	56	28	19	20	28	34	31	37	55	47	37	28	35	48	43	39	32
Koshkonong	Maximum	54	64	67	....	83	75	51	59	77	52	63	....	83	77	54	56	68	71	66	72	82	82	72	62	....	....	81	66	....	....
	Minimum	34	29	45	..	40	35	25	32	50	24	27	....	57	45	30	30	30	40	43	39	47	55	48	40	....	....	39	47	....	....
Lebanon §§	Maximum	48	66	59	65	80	38	56	87	72	53	55	79	71	52	50	56	71	73	70	75	82	75	56	78	72	77	[illegible]	64	69	75
	Minimum	31	26	32	40	48	33	23	28	35	19	36	35	53	43	26	22	23	42	45	42	41	50	43	30	30	35	45	47	46	40
Mountain Grove §§	Maximum	64	65	56	67	81	37	52	64	73	53	65	76	83	50	53	54	63	70	64	71	79	79	49	68	69	75	78	63	66	74
	Minimum	34	34	36	40	43	36	23	26	35	19	22	38	52	50	26	24	28	36	39	39	43	52	45	58	39	40	44	50	44	45
Neosho	Maximum	[illegible]	56	50	68	81	76	52	66	67	56	64	80	83	79	52	56	69	76	71	74	78	79	75	59	70	79	82	[illegible]	64	72
	Minimum	33	27	46	41	16	29	24	28	47	22	25	54	68	42	29	21	30	31	56	35	47	47	43	39	30	39	49	52	46	45
Rolla §§	Maximum	51	65	52	64	83	35	58	65	75	51	65	79	87	47	54	57	72	75	76	77	83	79	48	59	73	76	69	63	70	74
	Minimum	31	31	33	39	42	35	32	24	31	19	21	32	53	46	28	25	30	39	40	25	41	48	41	37	34	35	47	44	43	41
Springfield	Maximum	48	58	50	64	78	47	49	58	70	52	65	76	82	61	48	52	66	68	66	71	77	75	55	57	66	75	79	61	65	70
	Minimum	32	34	44	41	47	28	26	36	27	22	32	51	61	37	28	32	36	44	49	47	53	53	40	38	42	47	58	50	48	48
Southwest Plain.																															
Amoret	Maximum	53	59	47	63	73	53	50	60	67	50	66	80	95	79	51	58	78	75	72	74	77	71	63	61	71	82	80	60	59	71
	Minimum	23	28	41	41	44	26	21	29	35	27	31	43	58	39	28	22	31	35	38	42	45	56	37	31	32	45	37	44	45	38
Appleton City	Maximum	52	63	50	61	76	58	59	61	67	50	65	79	88	77	53	60	75	75	72	73	81	72	62	61	73	78	75	65	63	74
	Minimum	26	29	43	42	47	29	21	11	36	20	33	47	64	41	28	28	32	37	42	41	50	48	40	33	35	42	40	48	47	41
Clinton	Maximum	51	62	53	70	75	56	53	61	60	52	66	79	89	52	53	58	76	76	73	76	82	72	62	59	65	70	75	65	....	....
	Minimum	21	27	41	46	53	29	23	30	28	20	33	44	61	39	30	25	32	38	43	48	47	47	39	39	50	58	39	46	....	....
Harrisonville §§	Maximum	52	50	54	61	74	50	55	68	68	49	65	78	77	58	51	58	78	75	72	73	79	63	50	61	72	78	65	61	62	71
	Minimum	24	25	42	40	42	27	20	22	34	18	19	34	47	40	28	22	22	36	40	42	42	47	37	32	32	40	37	38	44	39
Lamar §§	Maximum	58	63	52	65	78	34	51	70	76	55	61	80	84	57	55	59	73	73	72	76	82	78	52	62	72	80	58	64	62	73
	Minimum	30	29	40	42	50	31	24	20	60	21	31	53	65	41	28	26	29	35	38	39	50	54	42	36	31	42	52	49	44	46
Lamonte	Maximum	51	58	70	60	72	50	52	63	70	50	65	78	88	77	50	51	73	75	70	74	80	56	50	51	71	78	69	61	68	70
	Minimum	24	26	40	40	40	27	20	27	30	19	32	47	60	35	28	20	34	39	39	40	49	38	37	31	29	45	38	45	45	44
Marshall	Maximum	49	58	52	59	71	53	51	61	70	45	64	76	89	77	51	57	75	76	73	74	81	74	48	60	71	79	68	60	67	72
	Minimum	25	29	35	39	39	27	20	29	32	18	31	45	58	26	29	24	33	37	49	40	45	48	36	31	33	40	38	43	44	37
Warrensburg	Maximum	53	59	50	62	74	53	54	64	68	53	68	79	89	78	51	60	78	78	74	76	82	68	48	52	73	80	68	63	66	75
	Minimum	26	34	39	42	47	27	22	32	32	19	34	50	60	35	29	30	34	42	44	46	48	47	36	32	42	46	39	45	47	37
Warsaw	Maximum	68	70	65	73	80	64	70	68	71	60	78	84	92	72	60	65	80	70	80	82	91	70	65	64	64	74	76	74	78	83
	Minimum	29	27	38	43	27	38	20	25	36	18	36	42	51	41	25	20	24	26	32	34	40	45	40	32	27	33	40	47	49	32
Northwest Plain.																															
Chillicothe §§	Maximum	49	57	52	62	69	38	53	70	70	45	62	72	87	49	50	72	78	77	73	74	76	64	50	65	72	78	62	60	66	71
	Minimum	20	29	31	41	42	22	19	29	42	15	25	41	41	31	29	21	33	40	40	39	48	43	39	27	29	45	35	39	41	30
Grant City	Maximum	43	53	53	60	62	40	52	58	63	44	61	71	82	70	50	60	73	80	75	76	72	62	66	76	74	75	60	62	62	74
	Minimum	17	31	31	39	38	20	18	35	24	13	30	31	52	28	27	23	34	41	39	40	47	41	30	35	32	44	31	30	39	38
Kansas City	Maximum	50	54	47	62	66	36	51	59	68	47	65	75	[illegible]	49	50	57	76	75	72	72	74	58	43	64	72	80	63	60	64	70
	Minimum	28	39	37	44	32	24	25	37	21	19	36	52	45	34	29	33	39	48	50	47	55	42	38	35	46	48	39	41	47	41
Kidder §§	Maximum	49	52	53	63	70	31	50	63	62	45	62	73	85	59	50	58	75	77	72	75	76	45	45	65	74	80	71	61	65	71
	Minimum	22	32	34	42	42	25	22	31	62	18	31	36	58	31	26	28	34	41	41	42	49	45	38	26	40	46	35	39	48	43
Lexington §§	Maximum	49	57	50	62	71	38	50	62	68	45	63	75	[illegible]	50	[illegible]	56	76	77	73	74	80	60	42	64	72	80	64	62	66	72
	Minimum	23	34	33	42	41	26	24	32	51	19	33	45	60	40	29	26	37	46	45	42	50	48	41	28	40	51	38	43	45	34
Maryville §§	Maximum	43	52	48	61	57	33	52	60	61	45	67	71	82	46	48	60	72	80	71	76	71	58	58	68	75	77	60	60	68	74
	Minimum	12	12	30	33	39	18	17	19	34	12	16	35	40	30	24	20	23	39	40	40	42	29	39	26	36	36	31	20	31	34
Oregon	Maximum	42	49	45	58	52	31	48	56	61	41	61	71	80	50	44	56	70	72	71	75	65	60	50	65	70	76	61	58	70	68
	Minimum	11	31	31	39	29	17	18	31	21	13	33	41	50	29	24	23	35	40	43	45	49	40	39	29	39	47	33	37	44	37
St. Joseph	Maximum	48	56	48	62	56	32	53	60	66	47	63	76	81	48	50	59	75	77	75	74	75	56	52	68	74	81	64	60	66	72
	Minimum	20	35	35	42	29	21	22	36	23	17	36	45	43	31	28	24	39	48	49	48	54	45	39	29	40	44	36	41	48	36
Trenton	Maximum	43	52	51	58	61	36	48	58	65	40	60	68	83	50	46	64	68	73	71	72	73	61	52	60	69	72	68	63	68	69
	Minimum	19	32	32	39	34	24	21	31	28	17	29	41	50	30	28	25	35	45	42	41	50	42	42	21	35	45	34	40	38	33

¹, ², etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is ch the preceding day on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
.05
1
2
4
6
8
M.G

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT IN MILES, FOR MARCH, 1918, AT THE UNIVERSITY O SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 21 and 22.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude 92° 20'. Elevation 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 7 a. m., 90th meridian time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau stan described in Circular I. Horizontal distance of the anemomete pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 6 feet. Distance of rain gage fr 2.6 feet. The ground in the immediate vicinity of the pan slop north, average 5 per cent grade. The soil is covered by blue gr being part of the University campus. There are no bodies of wate nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by Joseph W. Heisler, observer, Weather Bureau. This is one of the "Class A" stati signed to furnish practical information relative to evaporation. complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for March. 1918. at Columbia. Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.010	178*	.021	.069	.146	.034	.011	.050	.103	.212	.121	.057	.094	.392	.027	.092	.098	.215	.148	.126	.108	.159	.169	.011	.102	.127	.180	.181	.141	.170
Daily wind movement	62	30	38	49		79	52	32	47	121	79	72	31	143	105	47	31	57	12	16	31	13	91	48	43	109	63	47	66	42

*Total in next following measurement.

Observations taken at 6

AURORA BOREALIS.

A remarkable auroral display was observed from all parts of Missouri from about 6.30 p. m. to 10.30 p. m. March 7. The weather, as a whole, was clear and fine, and it was the most brilliant display of northern lights that has been observed from Missouri in many years.

The phenomenon as observed from Columbia, Mo., Section Center, first attracted attention about 6 30 p. m., being then represented by bars of light in the northern sky of varying degrees of luminosity, showing distinct coloring up to about 35°, a diffused yellowish light being the most prominent, however. In the Northwest there was a dull red spot, that at times seemed to grow brighter at the same time sending out a streamer or faint band toward the north or east. By 8 p. m. or a little after, the whole northern sky seemed a reflection of a fire of some great city. So noticeable was this, that the entire population of our city was out viewing the spectacle. The Weather Bureau's telephone was ringing constantly, the callers wanting an explanation of the northern light, many asking what great city was burning. By 9 p. m. to 9.30 p. m. the streamers grew longer and brighter, apparently reaching almost to zenith, turning the sky to a rosy red; in the northeast the light seemed to be bluish. The maximum luminosity probably was reached at about this time (9.30), for soon after the coloring began to fade, and by 10 p. m. was not noticeable to any but a careful observer.

Observers' Remarks.

Fayette---The month was unusually dry; only 5.57 inches precipitation during last six months. Northern Light 7th.

Clifton Hill---Heavy wind on 9th.

Gorin---Heavy wind on 9th. Abnormally dry month.

Kirksville---A wonderful Aurora Borealis night of the 7th; all colors of the rainbow.

Louisiana---Bright red and yellow lights in northern sky evening of 7th; resembled large flag.

Macon---Heavy wind damage on the 9th. Northern Light 7th

Mexico---Curious streamers of light visible in northern sky ev 7th; blue turning to red 8 to 10.30 p. m.

Oakfield---High wind on 9th; blew over corn shocks.

St. Catherine---Great Aurora in north evening of 7th; extend east to west. High winds on 9th, blowing over hay ricks.

Unionville---Very brilliant Aurora observed evening of 7th wind on the 9th.

Warrenton---Month's weather much like Indian Summer. March on record, save 1910. Crops look fair, nevertheless.

Caruthersville---Brilliant Aurora in the north 8 p. m. to 10 the 7th.

Marble Hill---Many are ready to plant corn. Wheat good; muc the average condition. All farm work much advanced.

Birchtree---The most brilliant Aurora Borealis I ever saw was on the 7th.

Bolivar---There was a strong wind on the 9th, upsetting small bu

Fruit City---Most of oats sown. Wheat looking poorly. Co being prepared, season good. Apple buds in good condition, but have been killed.

Houston---This has been a favorable month for farmers. W looking fine. Oats coming up well. Plowing for corn.

Lockwood---Very favorable March. Considerable wind. A g is needed. Wheat is in good condition; also oats, which are up.

Amoret---Month very dry; crops needing rain.

Appleton City---Wheat doing well, considering lack of rain.

La Monte---Water very scarce; rain is badly needed.

Warsaw---Only 4.20 inches in past three months.

Warrensburg---On the 7th, there was a great display of Northern Three distinct arches were visible, extending to the zenith.

Gallatin---Wheat in fine condition; rain is badly needed; soil, h in fine plowing condition. All oats planted. Stock stood the wint

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

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CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

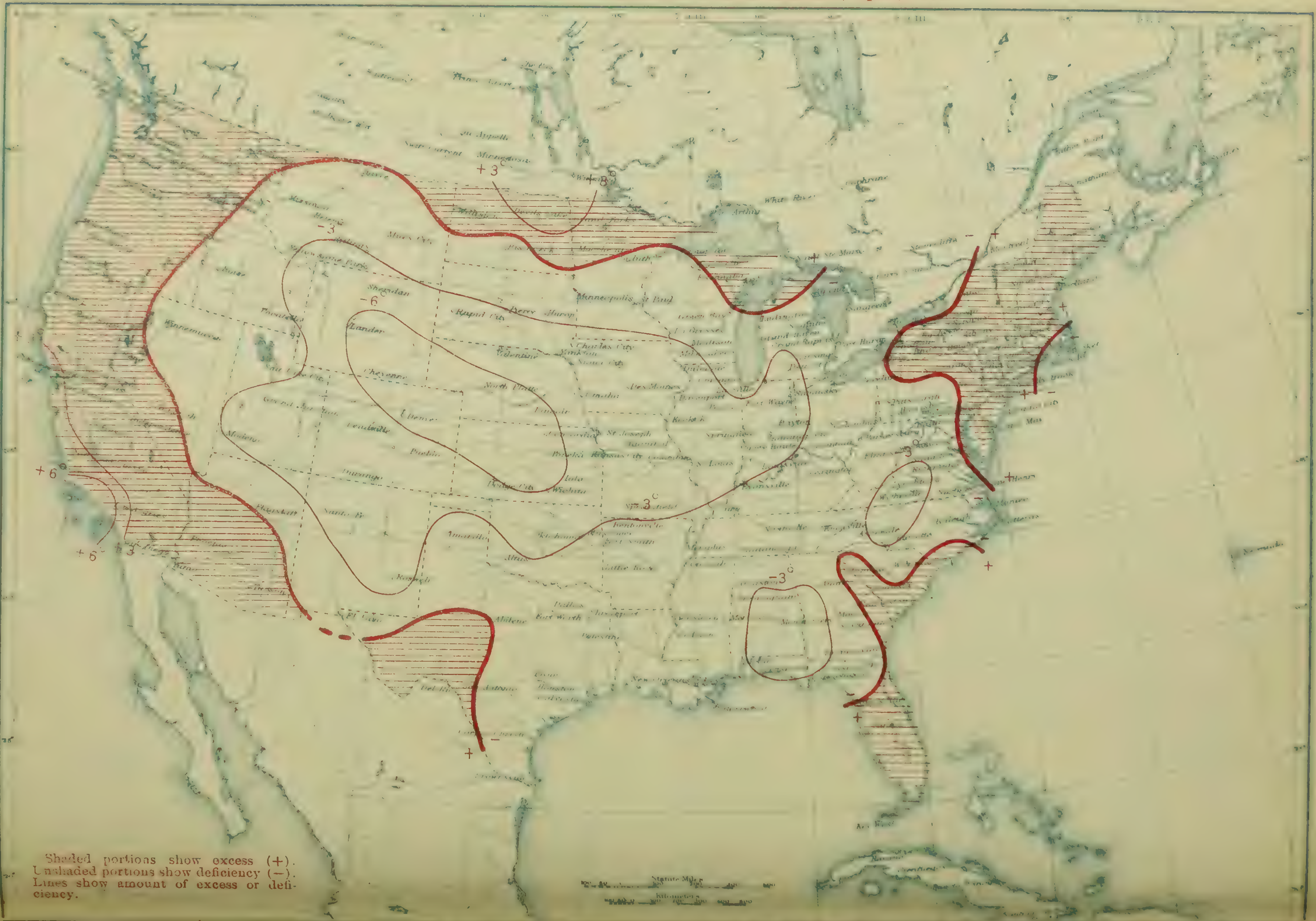
APRIL, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
MAY 28, 1918.

Departure of the Mean Temperature from the Normal, April, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXII. COLUMBIA, MO., APRIL, 1918. No. 4.

GENERAL SUMMARY.

il, 1918, in Missouri, was the third coolest month of its in about thirty years, otherwise there were no unusual er features. The precipitation was somewhat above nor- nd was well distributed. This precipitation fell as fre- and comparatively gentle showers, and was of the great- portance to all agricultural interests, as is was the first od wetting the soil has had in many months. There arcely any runoff, the soil being in an unusually open, ive condition. There were no damaging temperatures or fter the 11th, except perhaps the nights of the 20th and hen they were near the freezing point, although with t skies.

he close of the month farm work was ahead of the aver- at vegetation was somewhat backward. The wheat out- as excellent.

TEMPERATURE.

monthly mean, as determined from the records of 68 s, was 50.8°. The mean departure from the normal for ions having ten or more years' record was minus 4.4°. lering the State as a whole, only two Aprils during the years were cooler than the present April. The defi- in temperature in the southeastern lowlands was not marked as in the other four divisions, being only 1.8° in the Ozark Plateau, 4.6° in the southwestern plain, the northwestern plateau and 5.2° in the northeastern The maximum temperature reached 90° at five stations day, the 2d. Minimum temperature of 32° or lower d on 7 days in the northeastern plain, 2 southeastern ds, 4 Ozark Plateau, 6 southwestern plain, and 7 in the estern plateau. The temperature extremes were well the range of previous years.

PRECIPITATION.

average precipitation for the State, 85 stations reporting, 10 inches. The departure from the normal for 76 stations 10 or more years' record was plus 1.24 inches. The ly precipitation was above normal in all except the estern section. There was not much precipitation dur- first half of the month, but on and after the 15th to l of the month showers were frequent and general, and t, was the first good ground-soaking period in many s, and was of vast importance to agricultural interests. e was a heavy snowstorm on the 19th and 20th, over the estern, north-central, and northeastern counties, and a f snow was recorded as far south as the southeastern low- The heaviest fall, 17.0 inches, occurred at Bethany, of 14 inches fell on the 20th, 16.0 inches being on the at 7 p. m. Seven stations reported falls of 10 inches or This is the heaviest snow on record for April in the estern plateau. The storm along the Missouri River thward including the Ozarks and southwestern plain nixture of snow, sleet, and rain.

EVAPORATION.

total evaporation for the month, at Columbia, Mo., was inches; the total rainfall, 5.07 inches; the total wind ent over the surface of the pan, 1,840 miles, and the emperature, 49.5°. During the same month in 1917, data were in order named, 3.580 inches; 4.25 inches; miles, and 52.0°.

WIND.

revailing winds were from the northeast. The average wind nt was about 12 per cent greater than normal. Strong gales ob- n 2d, 15th, and 29th.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 229, or about 55 per cent of the possible, and about 6 per cent below normal.

MISCELLANEOUS PHENOMENA.

Fogs—13th. Frosts, heavy—9th, and 13th. Killing—5th, 8th, 9th, 10th, and 11th. Hail—1st, 2d, 13th, and 19th. Halos, solar—3d, 4th, 5th, 7th, 9th, 13th, 14th, 16th, 18th, 22d, 23d, and 26th. Lunar—4th, 16th, 24th, and 26th. Sleet—19th, 20th, 21st, 24th and 25th. Thunderstorms, local—3d, 14th, 20th, 23d, 24th, 25th, 26th, more or less general, 1st, 2d, 15th, 16th, 17th, and 27th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	29.96	76	.....	228	57	7,202	10.0	37	ne.	2
Hannibal	29.98	78	.....	.....	.....	7,742	10.8	36	sw.	29
Kansas City	29.98	71	48	229	58	9,806	13.6	55	e.	15
St. Joseph	30.00	71	45	213	54	7,511	10.5	38	nw.	28
St. Louis	29.97	75	65	171	43	10,144	14.1	45	w.	2
Springfield	29.94	78	60	270	68	8,559	11.9	42	se.	15
Cairo, Ill	29.95	76	66	.....	.....	8,660	12.0	37	ne.	6
Keokuk, Iowa	30.00	76	62	204	51	6,733	9.4	34	sw.	29

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	57.9	+2.8	91	20	1.83	−1.89	.....	.....	5	....	....	....
1889	55.7	+0.6	90	26	2.52	−1.20	.....	.....	8	....	....	....
1890	56.2	1.1	93	24	3.17	−0.55	.....	.....	8	....	....	....
1891	56.8	+1.7	93	15	3.90	+0.18	.....	.....	9	....	....	....
1892	53.1	−2.0	88	26	5.66	+1.94	4.25	.....	11	9	8	13
1893	53.9	−1.2	95	19	7.84	+4.12	5.50	.....	12	8	9	13
1894	56.1	+1.0	93	20	3.17	−0.55	2.49	T.	8	12	10	8
1895	57.9	+2.8	100	24	1.95	−1.77	2.88	T.	7	14	8	8
1896	61.9	+6.8	92	17	3.51	+0.21	3.00	0.0	9	11	12	7
1897	54.4	−0.7	88	21	4.55	+0.83	3.50	T.	10	10	11	9
1898	52.5	−2.6	90	14	3.65	−0.07	3.25	T.	10	12	9	9
1899	54.0	−1.1	96	6	3.70	−0.02	3.76	3.8	8	12	9	9
1900	56.7	+1.6	89	21	3.36	−0.36	1.82	0.7	9	11	10	9
1901	53.3	−1.8	94	24	2.85	−0.87	2.23	1.8	8	14	7	9
1902	53.9	−1.2	95	19	2.66	−1.06	1.55	T.	11	13	11	6
1903	55.9	+0.8	91	26	3.54	−0.18	1.06	1.2	9	11	10	9
1904	49.0	−6.1	84	19	5.75	+2.03	6.10	2.7	9	15	6	9
1905	54.9	−0.2	92	20	3.19	−0.53	1.10	0.3	6	14	8	8
1906	59.5	+4.1	93	22	2.24	−1.41	2.15	0.0	8	17	7	6
1907	48.7	−6.4	89	16	3.43	0.29	2.75	T.	8	11	8	11
1908	56.6	+1.5	96	18	5.30	+1.58	3.30	T.	11	11	8	11
1909	54.8	−0.3	93	19	4.35	+0.63	3.80	T.	8	13	9	8
1910	54.8	−0.3	95	21	3.51	−0.21	3.50	0.9	11	12	7	11
1911	53.5	−1.6	89	20	4.99	+1.27	4.27	T.	10	12	8	10
1912	56.0	+0.9	97	24	5.98	+2.26	4.50	0.7	10	13	7	10
1913	56.2	+1.2	94	25	3.33	−0.45	3.90	T.	7	16	5	9
1914	55.2	+0.1	91	18	3.14	−0.74	3.00	T.	8	12	7	11
1915	61.9	+6.5	96	18	2.03	−1.82	2.08	T.	7	16	8	6
1916	53.5	−1.8	93	21	3.23	−0.69	2.35	1.9	16	11	8	11
1917	53.2	−2.3	89	19	5.97	+2.02	4.80	1.2	12	12	6	12
1918	50.8	−4.4	93	19	5.10	+1.24	3.50	0.9	11	12	6	12

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	7.87	+4.15	2.60	0.0	9	13	2	15	.....	Wm. R. Bennett.
Boonville	41	5.20	+1.33	1.94	0.0	11	15	1	14	ne.	C. Randecker.
C. Girardeau	11	6.06	+2.35	1.60	0.0	13	5	4	21	ne.	D. L. Albert.
Glencoe	1	....	....	....	......	..	..	..	..	......	Vint R. Neel.
Hermann	44	5.60	+2.07	1.05	0.0	15	11	4	15	e.	C. T. Mauslund.
New Madrid	24	7.54	+3.43	2.74	0.0	15	9	2	19	ne.	Miss Josie Smith.
Osceola	18	5.64	+1.53	1.09	0.0	12	14b	1b	13b	......	Wm. E. Mathews.
Pacific	1	7.05	....	1.70	0.0	14	9	8	13	......	R. C. Dougherty.
Steelville	16	7.76	+3.56	2.22	0.0	13	14	0	16	nw.	Wm. J. Drennen.
Tuscumbia	1	5.84	....	1.65	0.0	13	14	3	13	ne.	C. B. Wright.
Union	1	8.79	....	1.87	0.0	16	7	5	18	nw.	J. Wm. Keller.
Valley Park	1	7.53	....	1.80	0.0	15	13	2	15	e.	H. J. Lucksinger.
Waverly	3	4.00	....	1.33	1.0	15	14	3	13	ne.	J. W. Cauthorn.

Climatological data for April 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Snow.	Number of days with .01 or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction.	Observer.
Northeast Plain.																				
Brunswick	Chariton	650	37	[illegible]	[illegible]	[illegible]	1	27	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Clifton Hill	Randolph	[illegible]	..	[illegible]	[illegible]	80	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Boone	[illegible]	27	[illegible]	[illegible]	[illegible]	2	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Howard	[illegible]	32	[illegible]	[illegible]	79	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fulton	Callaway	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gorin	Scotland	700	2								[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Marion	[illegible]	[illegible]	[illegible]	[illegible]	77	1	[illegible]	10		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City	Cole	[illegible]	[illegible]	[illegible]	[illegible]	82	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Keytesville	Chariton	660	1								[illegible]		[illegible]							[illegible]
Kirksville	Adair	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Pike	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon	Macon	[illegible]	10	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	Audrain	[illegible]	39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Franklin	[illegible]	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Palmyra	Marion	652	5	[illegible]	[illegible]	[illegible]	1	26	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catherine	Linn	[illegible]	1	[illegible]		[illegible]	1	[illegible]	10	[illegible]	2.52		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Charles	St. Charles	456	39	[illegible]	[illegible]	81	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.12		[illegible]					[illegible]
St. Louis (1)	St. Louis City	[illegible]	46	51.2	[illegible]	81	16	30	10	30	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (2)	do.	[illegible]	5	50.4		81	16	30	[illegible]	[illegible]	[illegible]		[illegible]	T.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shelbina	Shelby	779	25	....							[illegible]	[illegible]	[illegible]	[illegible]						[illegible]
Steffenville	Lewis	[illegible]	[illegible]	[illegible]	[illegible]	80	1	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	Putnam	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	22	[illegible]	[illegible]	[illegible]	[illegible]	1.80	10.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton	Warren	[illegible]	26	48.0	-6.8	84	2	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	se.	[illegible]
Keokuk, Iowa	Lee, Ia.	574	46	[illegible]	[illegible]	75	1	29	5	[illegible]	[illegible]	[illegible]	[illegible]	T	11	[illegible]	[illegible]	[illegible]	[illegible]	U. S. Weather B
Section means and extremes				49.0	-5.2	[illegible]	2	22	9	17	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	61.0	+1.1	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	H. F. [illegible]
Doniphan	Ripley	311	12	57.2	-0.8	87	2	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W. W. [illegible]
Jackson	Cape Girardeau	458	26	[illegible]	-2.4	[illegible]	2	29	[illegible]	[illegible]	6.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	s.	[illegible]
Marble Hill	Bollinger	420	25	57.1	+0.6	90	6	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	n.	[illegible]
Patton (near)	Bollinger	500	2	....							[illegible]		[illegible]	[illegible]	[illegible]					[illegible]
Poplar Bluff	Butler	339	13	54.7	[illegible]	[illegible]	2	31	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cairo, Ill	Alexander, Ill	359	44	[illegible]	[illegible]	80	2	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	n.	[illegible]
Section means and extremes				56.6	1.8	92	2	29	[illegible]	[illegible]	6.19	[illegible]	[illegible]	[illegible]					n.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	[illegible]	54.4	-2.7	89	2	29	10	[illegible]	4.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9	[illegible]	V. H. K[illegible]
Bolivar	Polk	1,071	29	51.4	-5.2	77	[illegible]	26	10	31	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	se.	A. C. [illegible]
Cassville	Barry	1,500	6	54.2	....	89	2	26	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	w.	[illegible]
Crocker	Pulaski	1,126	6																	[illegible]
Dean	McDonald	1,000	18	[illegible]	[illegible]	88	2	23	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	sw.	[illegible]
Eldon	Miller	934	16	49.8	6.6	89	2	23	10	[illegible]	5.74	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	e.	[illegible]
Fruit City	Reynolds	[illegible]	1	52.8		79	16	28	[illegible]	[illegible]	5.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	n.	[illegible]
Gano	Dent	1,250	13	50.0	6.5	82	2	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	7	12	ne.	[illegible]
Goodland	Iron	1,000	12	51.6	-3.3	81	16	27	10	37	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	10	9	n.	F. M. [illegible]
Hollister	Taney	735	8	56.4	-3.7	84	2	28	10	[illegible]	[illegible]	[illegible]	1.85	0	[illegible]	[illegible]	[illegible]	16	se.	W. P. [illegible]
Houston	Texas	1,280	[illegible]	53.6	[illegible]	87	2	28	10	[illegible]	[illegible]	[illegible]	[illegible]	T	8	[illegible]	[illegible]	10	nw.	R. L. [illegible]
Ironton	Iron	925	39	52.0	[illegible]	81	16	27	10	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	17	se.	W. H. [illegible]
Koshkonong	Oregon	958	[illegible]	55.8	-2.2	90	2	30	10	33	[illegible]	[illegible]	[illegible]	0	10	[illegible]	9	11	se.	R. M. [illegible]
Lebanon	Laclede	1,265	[illegible]	50.6	-5.7	90	2	[illegible]	10	40	[illegible]	[illegible]	[illegible]	T	11	17	6	7	sw.	[illegible]
Lockwood	Dade	1,078	22	54.1	-2.2	86	2	28	10	33	[illegible]	[illegible]	3.13	0.2	[illegible]	[illegible]	2	8	ne.	C. [illegible]
Mountain Grove	Wright	[illegible]	18	50.7	-4.2	87	2	26	11	40	7.39	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	11	ne.	Mo. [illegible] Exp. St
Mount Vernon	Lawrence	[illegible]	38																	C. [illegible]
Neosho	Newton	[illegible]	34	56.2	-2.0	87	2	24	11	38	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	4	nw.	W. O. B[illegible]
Rolla	Phelps	[illegible]	35	50.0	-5.5	83	2	27	11	39	[illegible]	[illegible]	[illegible]	0.4	15	[illegible]	[illegible]	12	n.	[illegible]
Springfield	Greene	1,350	29	51.8	-3.9	86	2	30	10	26	[illegible]	[illegible]	[illegible]	0.2	[illegible]	19	5	6	ne.	U. S. Weather Bu
Section means and extremes				52.7	-4.0	90	2	23	10	[illegible]	6.64	+2.40	3.50	T	11	[illegible]	6	10	ne.	
Southwest Plain.																				
Amoret	Bates	831	8	51.2	-4.2	86	2	25	10	38	2.85	-1.50	0.55	T.	[illegible]	12	8	10	ne.	[illegible] Farm
Appleton City	St. Clair	[illegible]	26	51.9	-4.2	86	2	28	10	31	4.18	-0.10	0.87	T.	12	[illegible]	7	8	ne.	W. G. [illegible]
Clinton	Henry	[illegible]	30	52.4	-3.6	83	1	28	10	35	3.59	[illegible]	0.45	0	[illegible]	10	9	11	ne.	A. L. Derwent, M.
Harrisonville	Cass	912	[illegible]	48.8	-5.5	79	1	28	10	38	4.96	-1.63	[illegible]	3.5	[illegible]	8	6	16	ne.	A. J. Sharp
Lamar	Barton	[illegible]	[illegible]	53.0	[illegible]	88	2	[illegible]	10	36	5.97	[illegible]	[illegible]	0	10	17	1	12	w.	Joe W. [illegible]
Lamonte	Pettis	[illegible]	8	49.0	7.3	80	2	24	10	43	3.24	-0.48	1.12	2.0	9	13	8	9	ne.	J. Ed. Hall
Marshall	Saline	[illegible]	[illegible]	[illegible]	4.9	79	1	26	10	35	3.91	[illegible]	[illegible]	T.	12	8	7	15	e.	Dr. W. H. Black.
Warrensburg	Johnson	[illegible]	38	[illegible]	-6.0	82	1	27	10	37	3.84	-0.72	0.97	6.0	13	11	10	9	ne.	Geo. H. Collins.
Warsaw	Benton	[illegible]	12	54.6	-1.8	93	2	22	10	43	5.96	+1.91	1.15	T.	13	12	9	9	e.	J. R. Smith, M. D.
Section means and extremes				51.2	-4.6	93	2	22	10	43	4.28	+0.08	1.55	1.3	12	12	7	11	ne.	
Northwest Plateau.																				
Avalon	Livingston	730	31	50.6	-3.1	80	1	25	10	36	3.15	-0.06	1.70	6.0	6	12	8	10	se.	F. G. Ashbaugh.
Bethany	Harrison	916	27	48.0	-3.2	81	1	19	11	50	2.84	0.12	0.50	17.0	8	9	7	14	ne.	M. H. Moulton.
Chillicothe	Livingston	768	1	47.9	-6.6	81	1	23	[illegible]	46	2.15	-2.67	1.00	7.0	6	13	4	13	e.	Dr. J. R. Campbel
Conception	Nodaway	[illegible]	32	47.3	5.0	76	1	25	10	34	1.72	-0.99	0.40	7.0	8	11	13	6	ne.	Fr. Adelhelm Hess
Gallatin	Daviess	[illegible]	17								2.98	-0.63	0.85	9.3	12	11	6	10	se.	Robert R. Wynne
Grant City	Worth	[illegible]	21	47.5	-1.8	80	1	24	11	42	2.40	-0.47	0.85	[illegible]	8	10	5	15	ne.	W. H. Campbell.
Kansas City	Jackson	[illegible]	[illegible]	[illegible]	5.0	78	1	31	24	30	2.87	0.42	0.66	[illegible]	11	13	8	9	ne.	U. S. Weather Bur
Kidder	Caldwell	1,020	[illegible]	49.2	3.7	80	1	23	10	40	2.36	-0.43	1.05	[illegible]	11	16	2	12	ne.	J. F. Sharp
Lexington	Lafayette	[illegible]	[illegible]	49.8	1.8	80	1	27	10	35	3.35	+0.14	1.01	2.5	13	11	[illegible]	16	n.	J. W. [illegible]
Liberty	Clay	[illegible]	28	50.8	4.7	82	1	25	10	41	3.19	+0.09	1.00	10.0	10	13	6	11	e.	W. C. Wilmott.
Maryville	Nodaway	[illegible]	[illegible]	45.6	-5.0	78	1	23	10	39	[illegible]	0.17	0.78	10.0	9	16	3	11	e.	J. R. [illegible]
Oregon	Holt	[illegible]	[illegible]	45.2	-7.5	73	1	25	10	[illegible]	[illegible]	-0.15	1.00	[illegible]	9	12	11	7	ne.	Tom Curry.
St. Joseph	Buchanan	[illegible]	[illegible]	49.0	.....	79	1	30	11	38	2.57	0.30	1.19	1.5	9	11	8	11	e.	U. S. Weather Bur
Tarkio	Atchison	[illegible]	[illegible]	47.9	5.1	79	1	25	[illegible]	43	1.64	[illegible]	0.70	10.0	7	13	4	13	ne.	John F. Frazier.
Trenton	Grundy	[illegible]	[illegible]	48.3	-1.9	75	1	26	[illegible]	39	3.79	+0.93	1.10	10.0	8	[illegible]	6	11	ne.	W. H. Estes.
Section means and extremes				48.3	-1.9	[illegible]	1	19	11	50	2.71	-0.14	1.70	8.7	9	13	6	11	ne.	
State means and extremes				50.8	-4.4	93	2	19	11	50	5.10	+1.24	3.50	0.9	11	12	6	12	ne.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete rep[illegible] used [illegible]

[illegible] letters [illegible] in the table indicate number of days missing; for example, b represents two days, etc.

[illegible] post-office addresses of these stations are as follows: o Oakfield, Pacific, [illegible] No. 1, of Dean, Anderson, of Gano, Salem, R. F. D. No. 5, of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for April, 1918.

stations.	Watersheds.	Day of month																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
st Plain.																																	
	Missouri	T		.06			.26	.18									.04	.64	.13	.03	.56	.16	.03		T	.35	.37	.15	1.94				5.20
	Grand	.19		.15			.18	.55									.11	.35	.10		.63	.35				.41	.20	.08	.42				3.17
	Chariton		.18				[illegible]									.02		.27		.30	1.10	.02			.10	.58		.06	.35				3.73
	Missouri	T	[illegible]			.01	.01									.49	.30	.19		.63	.15	.05	T		.26	.82		.74	.07				5.07
	do	.07	.09															.71		.11	.38	.04			.28	.33		.55	.30				3.19
	do			.15			1.22									.55	.01	.90		.60	1.02	.02		.01	.26	.50	.01	.62	.30				6.07
	Meramec																																
	Mississippi						1.01									.35		.09		.37	.30	.03				.58		.46					3.19
	do	[illegible]	.08				.08									.14	.33	.31		.38	.49	.01	.01		.01	.82		.74	.07		T.		1.40
	Missouri	T	[illegible]	.17			[illegible]	1.05									.18	.47	T.	.05	.55	.20	T	.06	.12	.72	.58	.10	1.10				5.60
City	do						[illegible]	.76									.52	.60	.06	.10	.25	.07	.05	.02	.22	.92	.55	.10	.65				5.72
	Chariton	.09	[illegible]				.50									.06		.28		.42	.70			.08		.10	.70	.25	.13				3.41
	Mississippi	.01					.53									.48	.04	.02		.55	1.00	.01			[illegible]	.21		.29	.36				[illegible]
	do	.76	.14	[illegible]			1.40									.06		.64		.32	.48	.04		.12	.06	.95		.06	.96				6.54
	Chariton			.02			.18	.60												.01	.40	1.06					.37		.23				2.87
	Mississippi	[illegible]		.10			.16	.97										.18					.70			.80	.40		2.20				6.33
	Meramec	T	.16				1.20									.08		1.42		.25	.42	.06		.65	.95	1.76		1.16	.19				7.70
	do	[illegible]	[illegible]	T			.73	.32									.07	1.57		.09	.62	.03	T.	.03	[illegible]	.70		.02	1.10	T.			7.05
	Mississippi	[illegible]		[illegible]			.03	.89									.15	.44	.34		.49	.55					.75		.69				5.00
	Grand	.16		[illegible]			.51									.06	.03	.07		.21	1.07	T.				.14	T.	.42	.22	.03			2.82
	Missouri	.20		.27			1.00									T		1.00		.16		T.			[illegible]	1.12		.55	.09				4.94
	Mississippi	.33	[illegible]	T.		[illegible]	.76									.07	.94	.88		.60	.21	.01		.04	.99	1.32	T.	.53	.14				7.09
	do	.10	.12			.02	[illegible]									.07	.73	1.04		.61	.24	T.		.09	1.28	1.65		.80	.21				8.56
	do		.20													.38		.45		.52	.67					.97		.42					4.55
	do	[illegible]					[illegible]									.25				.35	.60	T.				.65		T	.35	T.			3.31
	Meramec	[illegible]	.07				[illegible]	.92									.12	1.45		.15	.66	.11		.05	.38	1.67	.78	.04	[illegible]				8.79
	Osage			[illegible]			[illegible]	.30									.62	.04	.20	.20	.70	1.10	.15				T		.45	T.			3.88
	Meramec	.10	[illegible]	[illegible]			[illegible]	.83									.05	1.63		.04	.59	.01	T.	.05	.28	1.80	.73	.07	1.01				7.53
	Mississippi		[illegible]	.33			[illegible]	.71									.06	.30			.26	.24	T.	.03	.02	.69	.40		.76				4.50
	do	.01	.52	T.			[illegible]									.31	T.	.11		.06	.13	.01				.32		.18	.13				2.66
Lowlands.																																	
deau	Mississippi	[illegible]	.85	.05			.02	.45									.45			.02	1.30	.20			.10	.60	.40		1.60				6.06
	do	T		[illegible]			[illegible]				T.	.05				T.	1.24	.30		.68	.83			T	.15	T			1.06				1.83
	Black		.35	.16			[illegible]								T.	.22	.63	1.57		.55	1.75				.72	.12			.15				7.51
	Mississippi		[illegible]				.58				.02					.42		.67		1.30					.98	.40		1.08					6.01
	do		[illegible]				[illegible]										.44	.70	.10		1.30				.95	.55		.85					6.29
	do		.08	[illegible]	.01		.07	.04				.04					1.30	.63		.61	1.04				.55	.02	.03		2.74	.01			7.54
	do	[illegible]	[illegible]													.50	1.00								.50		1.00	1.20					5.50
	Black	[illegible]	[illegible]	[illegible]			[illegible]	.40									.77	.69		.44	1.40	T.			.40	.21	.12		.58				7.00
	Mississippi	[illegible]	[illegible]	[illegible]			.05				T					.58	T	.32		.53	.61	T.		T.	.03	.06	T.	T.	1.85				6.18
[illegible]																																	
	Gasconade	[illegible]		.30			.65										.35	1.10							.25	2.60		.50	1.82				7.87
	Black	.42					[illegible]									.24		.47		.10					1.03	.13			1.06				4.91
	Osage	[illegible]					[illegible]								.05	.15		.65		.40	.30				.33	.87	2.05						6.08
	[illegible]	[illegible]					.33									.16		.46		.11	.03					.80			.27				3.19
	Gasconade																																
	Neosho					1.35	.05								.17	.47		.25		.08	.01				.16	.67		1.13					4.34
	Osage					[illegible]	[illegible]									.44		.45		.85	.04	.03			1.31	.28		1.24					5.74
	Black	[illegible]	[illegible]				1.20									.20		.68		.25	.30	.04			.90	.35		.30	.95				5.57
	Meramec	[illegible]	[illegible]				1.35									.26	.12	1.15		.27	.19	T.			1.19	2.54		.77	.62				8.71
	Black	[illegible]					[illegible]									.15		2.20			.39			.06	1.01	2.45		.25	.90				8.51
	White			.27		[illegible]	.75	1.25	1.05						2.26				.60		.75				.70	.75	.45	.48	1.85				12.14
	Gasconade	T				T	.20									.32	T	.95		.35	T.	T.			.81	.01		.25	.52				3.41
	Mississippi		[illegible]				[illegible]	.83									.37	.85		.23	.92	.10			.18	3.59	1.20		1.12				10.90
	Black					[illegible]	[illegible]									.35	.02	.80		.24	.11				.61	.04			[illegible]				4.82
	Osage	.10					.50	[illegible]								T.	.41	1.16		.18	.07		T.			2.36	.20	.31	2.16				7.98
	do					.41	.43								.16	.25		.48		.23	.32	.03			.20	1.26		3.13	.70				7.63
Grove	White		[illegible]	T.			.78	.93								.05	.60	.95	.10		.21	.07			[illegible]	2.47	.07		1.04				7.39
	Neosho																																
	do	[illegible]				[illegible]	.06								.17	.47		.33		.28	.06	.01			.63	.94	.01	1.30	.20				4.92
	Meramec	[illegible]	.17	[illegible]			[illegible]	1.14									.25	1.25		.07	.17	.05	T.	T	.40	2.15	.25	.14	2.05				8.90
	White	T				.41	[illegible]								.11	.28	.52	.01		.09	.10	.02			.53	.34	.04	.99	.05				4.25
	Meramec	.25	.15	.03			1.35										.20	1.04		.06	.28	.04			.36	2.22	.43		1.25				7.76
	Osage						.58	.62									.52	.48	T.	.07	.18	.02	.02		.24	.93	.20	.33	1.65				5.84
st Plain.																																	
	Osage					.30	.24									.43		.52		.50	.07	.04				.15		.55	.05				2.85
City	do					.30	.23								.65	.15		.72	T.	.65	.08	.10			.21	.19		.87	.03				4.18
	do				.45	.45									.30	.20		.80		.40	.15	.15				.42			.27				3.59
ville	do	.03		.21			.48	.05								.22	.27	.32		.01	.52	.25			.27	.52	.03	.63	1.15				4.96
	Neosho					T.	.83								.09	.17		.46		.33	.32	.08			.74		1.55	1.40					5.97
	Missouri			T.		T.	.50								T.	T.		.01		.73	.11	.10			.20	.27		1.12	.20				3.24
	do		.29		.06		T.	.45								T.	T.	.62		.50	.23	.12		T.	.30	.20	.04	.30	.80				3.91
	Osage						.76	.08								.26		.63		.50	.28	.07			.89	1.09	.07	.68	.33				5.64
burg	Missouri	.06		.02		.04	.32								T	.24		.97		.52	.15	.17			.27	.19		.78	.11				3.84
	Osage			T.		.11		.92							.06	.25	.60			.53	.12		.24		.52	1.03	.18	1.15	.25				5.96
	Missouri	.06		.02			.12	.21								T.	.11	.44	.02	.04	1.33	.10		T.	.02	.78	.06	.10	.59				4.00
st Plateau.																																	
	Grand																.10	.50		.85	.85					.45		.40					3.15
	do		T.			T.	.16									.16	.20			.85	.90	.07				T.		.30	.20				2.84
	do						.10	.10									.35				1.00					.10			.50				2.15
	Missouri		T.	T.		T.	.21								T.	.16	.25	.07		.20	.40					T.		.25	.18				1.72
	Grand					.02	.15									.14	.24	.05		.80	.85	.15			.01	.12	T.	.30	.15	T.			2.98
	do		T.		.15			.07	.25								.19	.07		.70	.85									.12	T.		2.40
	Missouri		T.			T.	.31								.01	.61	.01	T.		.59	.09	.03	T.		.52	.14	.03	.53					2.87
	Grand						.13	.02								.05	.35	.02		.05	1.05	.22				.10	.01		.36				2.36
	Missouri	.05		.01			.15	.08								.07	.13	.09		.03	1.04	.23			T.	.66		.13	.68				3.35
	do						.21									.55	.17	T		.65	.35	.03	T.		.50	.11	T.	.32	.30				3.19
	do			.12			.18									.05	.22	.03		.03	.75	.78				T.			.37				2.53
	do					T.	.20									.23	.12	T			1.94				.01	.05	.03	.52					3.10
	do		T.			T.	.25								T.	.32		.03		1.03	.25				.06	.06	.03	.54	T				2.57
	do		T.			T.	.33								T	.14	T.	.09		T.	.70	.05						.13	.20				1.64
	Grand		T				.12									.37		.11		1.10	.90	.73				.11	T.	.35	T.	T.			3.79

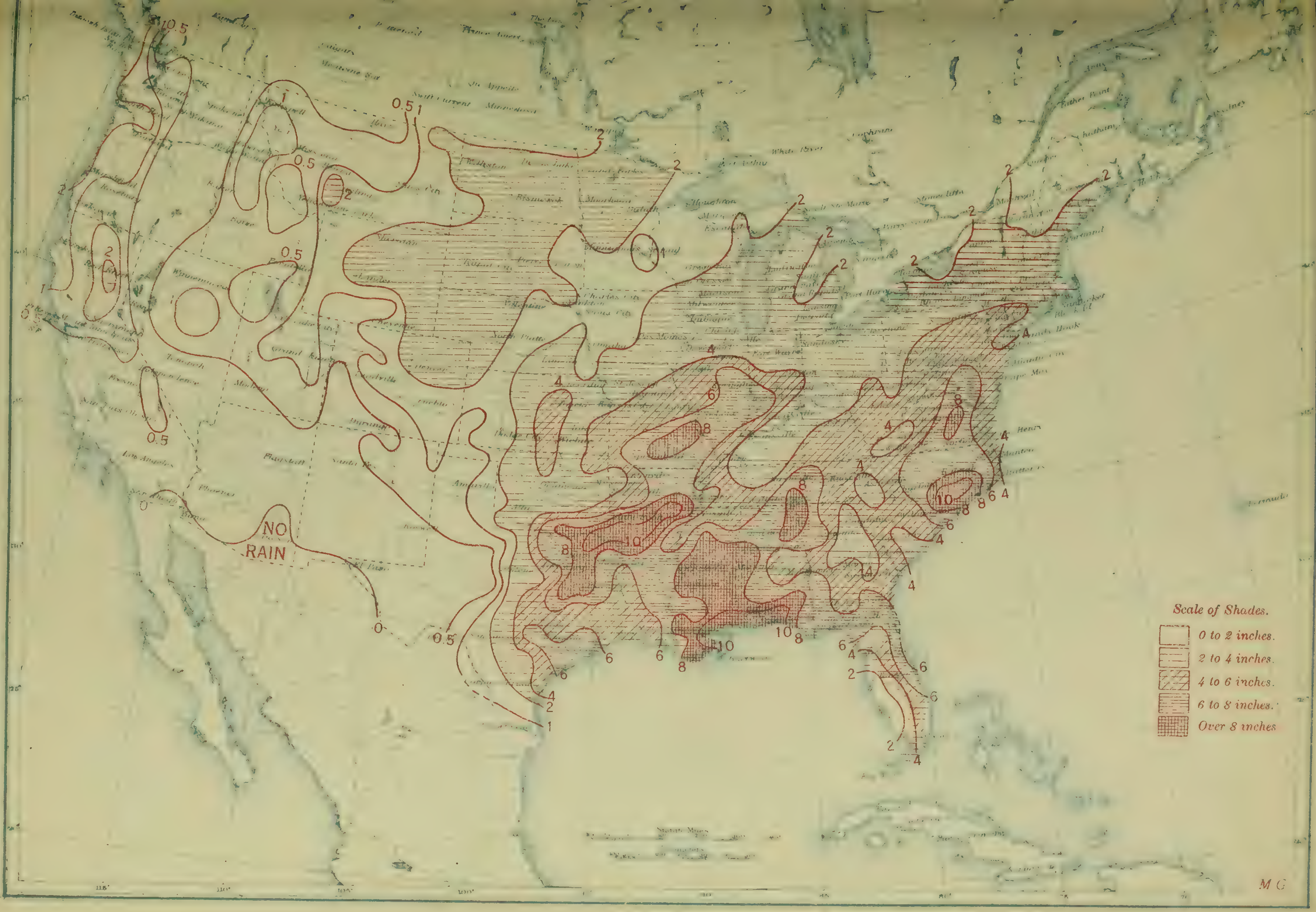
cept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
observation. || Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch
ar Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
fall not recorded.

Daily temperatures for April, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	80	77	64	59	52	60	61	57	[illegible]	60	61	[illegible]	61	[illegible]	[illegible]	74	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	46	47	42	31	34	[illegible]	[illegible]	[illegible]	29	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum...	75	53	51	[illegible]	54	58	60	55	48	51	[illegible]	52	64	66	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	55	45	38	36	33	45	40	36	29	28	32	35	36	48	54	54	50	47	37	32	32	44	42	36	41	40	50	41	44	[illegible]
Fayette	Maximum	79	74	[illegible]	56	51	57	62	52	48	51	54	52	65	67	68	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	50	44	38	34	33	47	42	[illegible]	30	27	32	35	34	47	[illegible]	48	48	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	77	76	52	52	56	54	58	50	48	50	48	53	65	66	[illegible]	74	64	68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	50	43	38	35	36	45	44	31	29	28	34	38	34	44	50	55	46	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	85	82	58	58	55	60	62	55	52	55	[illegible]	54	66	68	61	78	69	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	53	42	37	35	35	39	50	30	27	29	33	34	35	52	52	52	46	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum...	78	72	53	55	55	56	58	50	50	54	56	52	65	65	63	71	67	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	40	41	31	32	27	41	36	28	25	24	28	46	[illegible]	39	47	52	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	[illegible]	72	70	52	54	55	60	60	57	52	51	51	63	67	66	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	53	52	39	[illegible]	32	45	42	35	30	[illegible]	33	40	43	45	50	54	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	82	72	56	57	52	59	61	63	51	55	57	57	65	70	62	72	78	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	45	45	39	33	30	30	34	29	30	26	26	31	34	35	44	52	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum...	80	84	48	50	[illegible]	56	62	52	49	52	51	52	65	69	69	72	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	52	52	38	35	29	32	39	33	28	26	28	32	32	[illegible]	45	49	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum...	76	81	70	55	55	54	65	54	48	50	46	49	65	67	64	81	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	55	57	39	34	32	43	43	33	27	26	36	39	36	45	50	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum...	75	70	56	55	55	57	60	52	50	55	57	52	63	65	64	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	42	46	38	32	30	42	37	28	26	25	27	33	31	46	[illegible]	52	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	73	77	49	53	54	53	63	52	48	49	45	56	62	65	63	81	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	47	35	36	[illegible]	46	48	36	30	30	39	42	41	48	51	57	57	51	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum...	80	66	56	48	65	56	51	55	55	56	60	56	65	70	76	70	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	33	31	31	33	25	26	33	25	22	22	24	26	30	33	40	50	50	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum...	78	84	47	[illegible]	54	51	61	52	47	49	46	51	65	69	60	80	65	71	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	50	54	39	34	30	31	41	35	27	27	27	34	36	38	47	49	53	45	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands																															
Caruthersville	Maximum...	80	92	85	61	64	68	75	76	56	56	52	54	72	80	78	86	[illegible]	[illegible]	76	70	[illegible]	[illegible]	[illegible]	76	[illegible]	68	[illegible]	80	77	[illegible]
	Minimum	54	62	58	48	45	52	49	47	32	33	36	39	37	48	52	[illegible]	58	48	58	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	82	87	78	62	[illegible]	62	70	69	55	54	50	57	65	68	70	82	76	75	69	60	56	75	78	72	[illegible]	[illegible]	75	74	73	[illegible]
	Minimum	55	58	60	47	41	50	45	48	33	33	39	43	32	48	53	58	56	42	50	48	[illegible]	46	48	47	[illegible]	50	[illegible]	[illegible]	43	42
Jackson	Maximum	76	82	78	60	61	64	69	69	50	45	47	51	70	70	70	82	80	77	65	59	60	74	72	60	[illegible]	[illegible]	72	[illegible]	74	[illegible]
	Minimum	55	55	47	45	57	46	40	42	29	29	31	40	41	39	45	52	55	57	51	43	38	44	44	34	50	45	[illegible]	[illegible]	42	[illegible]
Marble Hill	Maximum	71	82	[illegible]	62	85	90	72	72	54	50	51	67	59	73	74	84	75	77	67	62	[illegible]	74	72	[illegible]	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]
	Minimum...	55	55	49	42	47	41	40	44	25	30	37	34	45	40	40	55	56	58	45	43	57	46	47	[illegible]	[illegible]	45	[illegible]	57	[illegible]	[illegible]
Poplar Bluff §§	Maximum	80	85	65	65	57	62	73	65	54	54	50	54	65	71	70	82	72	74	63	[illegible]	[illegible]	74	79	55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	52	53	57	48	39	40	45	45	31	31	32	38	32	33	46	56	57	40	40	47	31	42	47	48	46	[illegible]	44	47	[illegible]	42
Ozark Plateau.																															
Birchtree	Maximum	81	89	63	64	55	60	67	65	56	53	50	53	64	64	63	81	77	73	66	57	[illegible]	75	75	72	[illegible]	[illegible]	70	68	68	62
	Minimum...	50	59	57	44	39	47	42	44	50	29	38	40	34	42	49	57	52	40	[illegible]	42	[illegible]	45	[illegible]	[illegible]	42	[illegible]	47	48	[illegible]	[illegible]
Cassville	Maximum...	80	89	85	81	64	63	63	59	55	55	61	67	67	70	71	83	72	70	79	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	52	53	50	45	38	41	32	40	33	27	26	31	39	45	52	49	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42	[illegible]
Eldon	Maximum...	82	89	57	59	52	64	62	55	51	55	57	52	68	64	62	77	66	68	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	50	47	36	35	33	44	38	32	24	23	28	32	31	46	42	54	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40	[illegible]	47	[illegible]
Fruit City	Maximum	73	78	71	58	55	56	65	63	53	50	49	53	60	65	66	79	75	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	47	57	46	41	37	46	45	42	29	28	38	40	34	40	50	56	53	46	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gano	Maximum...	70	82	75	57	55	56	62	56	50	47	48	48	56	60	61	69	78	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	52	55	41	37	34	47	41	38	28	26	35	38	30	43	50	56	50	45	42	36	[illegible]	45	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hollister	Maximum...	66	84	76	68	66	68	72	76	74	72	74	70	72	76	68	72	76	72	68	64	72	76	70	[illegible]	68	74	74	78	76	78
	Minimum...	38	40	41	42	40	42	40	34	30	28	30	40	42	46	44	42	40	38	42	44	42	38	[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ironton §§	Maximum...	73	80	64	57	56	57	67	67	48	49	45	50	62	68	63	81	75	72	60	47	50	73	71	[illegible]	[illegible]	[illegible]	65	65	[illegible]	59
	Minimum...	57	51	48	42	35	46	37	40	28	27	38	39	28	39	45	56	53	35	48	42	43	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Koshkonong	Maximum...	83	90	77	69	57	60	63	61	53	55	51	60	66	69	67	83	75	73	65	55	56	74	77	70	[illegible]	[illegible]	75	70	70	64
	Minimum...	50	58	57	44	41	45	45	44	31	30	36	40	35	48	49	56	51	46	45	42	46	45	47	44	44	44	47	49	47	44
Lebanon §§	Maximum...	81	90	60	58	51	62	61	66	50	55	57	61	60	62	66	82	65	66	50	43	55	76	70	46	50	[illegible]	58	62	63	56
	Minimum	51	55	41	43	40	40	35	40	29	26	26	28	28	36	54	50	53	45	44	48	31	36	40	43	38	41	41	46	44	38
Mountain Grove §§	Maximum	80	87	64	60	51	60	65	58	52	55	53	60	63	60	64	80	65	69	51	43	53	75	71	47	[illegible]	62	61	62	63	57
	Minimum...	46	50	52	45	41	40	38	40	29	27	26	32	35	35	45	47	72	44	45	40	52	[illegible]	42	44	[illegible]	40	41	44	40	37
Neosho	Maximum	80	87	85	62	60	63	64	62	60	56	60	66	69	70	73	78	79	65	61	60	60	75	74	[illegible]	[illegible]	70	69	64	64	62
	Minimum...	51	53	48	45	39	43	33	41	33	26	24	34	39	67	52	50	50	40	47	36	32	37	31	[illegible]	[illegible]	[illegible]	51	40	46	40
Rolla §§	Maximum...	76	83	57	59	54	58	63	58	49	53	50	54	65	67	70	81	55	70	[illegible]	43	62	72	[illegible]	[illegible]	[illegible]	62	61	62	65	57
	Minimum...	52	53	45	41	35	35	40	39	29	28	27	34	34	34	49	52	52	44	45	28	32	33	[illegible]	[illegible]	[illegible]	[illegible]	47	44	42	40
Springfield	Maximum...	78	86	69	56	48	61	61	55	51	52	57	61	63	64	66	76	62	63	[illegible]	47	55	70	58	54	45	[illegible]	61	61	59	55
	Minimum...	53	62	45	44	37	43	44	39	32	30	33	36	40	46	50	54	49	47	47	32	31	44	44	40	42	41	48	46	47	42
Southwest Plain																															
Amoret	Maximum...	80	86	74	60	58	65	67	60	56	57	61	65	69	71	71	72	67	62	59	41	59	65	65	64	49	55	58	66	64	61
	Minimum...	41	48	39	38	38	41	37	40	26	25	28	31	36	50	51	47	48	41	37	33	30	37	37	37	39	46	47	36	46	37
Appleton City	Maximum..	80	86	75	60	59	64	65	62	55	58	62	63	68	66	70	70	68	62	59	42	56	64	64	63	48	54	59	63	62	60
	Minimum...	51	52	42	39	40	42	38	40	30	28	30	30	38	49	53	52	50	41	41	35	31	38	40	39	42	41	50	39	46	39
Clinton	Maximum..	83	70	65	60	63	66	65	63	57	59	63	65	71	68	69	75	70	65	60	42	57	65	67	63	48	52	60	65	63	61
	Minimum...	50	54	48	40	39	46	31	39	30	28	31	38	36	50	53	50	50	42	40	34	31	40	40	39	41	41	49	40	45	57
Harrisonville §§	Maximum...	79	75	60	61	46	64	61	57	53	56	60	63	70	58	67	72	65	64	50	37	56	63	65	50	47	52	58	64	62	[illegible]
	Minimum...	46	46	41	39	39	37	35	38	30	28	29	28	32	35	50	49	48	40	42	35	30	32	38	38	35	39	40	37	37	39
Lamar §§	Maximum	81	88	65	60	47	65	66	62	59	60	65	68	71	67	74	77	66	63	52	42	61	75	71	50	50	62	61	66	65	62
	Minimum...	52	54	43	42	43	43	35	40	31	29	29	36	40	48	52	51	50	40	43	41	32	39	41	46	40	42	52	41	41	41
Lamonte	Maximum...	75	80	57	59	50	61	62	55	52	56	60	60	69	63	67	75	64	66	55	40	52	62	65	54	46	52	61	63	58	58
	Minimum...	40	37	40	36	36	45	35	35	26	24	26	26	34	49	54	50	40	39	37	32	30	39	36	37	46	41	48	40	46	36
Marshall	Maximum...	79	75	58	59	52	60	61	59	51	57	61	59	66	66	64	74	70	67	63	38	52	61	68	59	47	57	59	63	61	58
	Minimum...	47	50	39	35	34	43	38	35	29	26	30	33	31	46	53	51	48	39	35	32	31	38	37	32	40	41	49	40	46	38
Warrensburg	Maximum	82	72	57	58	53	61	63	58	53	58	60	63	72	65	68	74	68	66	60	40	55	63	66	52	47	50	58	64	60	61
	Minimum...	48	49	41	37	37	42	40	37	29	27	30	32	35	51	51	51	49	42	36	33	31	40	40	36	40	40	47	39	47	39
Warsaw	Maximum	92	93	75	65	60	67	68	61	58	60	70	72	78	65	72	84	70	72	59	42	63	65	76	63	60	68	65	68	68	68
	Minimum	50	75	43	40	41	42	32	39	30	22	27	29	37	51	53	50	50	36	42	35	32	35	42	39	42	42	50	41	48	36
Northwest Plateau																															
Chillicothe §§	Maximum...	81	69	59	58	51	62	62	57	54	69	61	58	66	68	66	72	66	68	42	36	49	56	64	55	44	56	59	60	50	61
	Minimum	39	39	39	33	31	35	38	29	25	23	25	28	32	36	51	50	49	37	37	33	31	31	36	40	39	40	42	39	45	40
Grant City	Maximum	80	75	49	55	52	61	57	52	51	57	60	60	65	68	68	71	65	69	53	53	55	55	56	53	51	53	52	52	56	58
	Minimum	38	43	33	32	33	39	36	27	27	25	24	33	34	45	49	44	42	32	36	35	30	37	37	38	40	39	45	35	41	36
Kansas City	Maximum	78	69	57	55	46	62	60	56	52	56	58	61	66	58	65	69	63	61	56	36	54	60	62	47	46	48	56	61	61	60
	Minimum	48	45	39	38	35	42	43	31	32	32	33	39	41	53	50	50	50	45	34	31	31	41	43	31	40	40	45	38	46	42
Kidder §§	Maximum..	80	69	58	58	49	67	62	55	55	58	68	62	66	67	68	69	76	65	55	34	51	56	62	55	47	51	68	58	55	60
	Minimum...	40	45	39	34	41	40	39	30	28	23	26	32	35	48	49	48	48	40	40	32	33	40	38	42	40	40	48	36	44	38
Lexington §§	Maximum...	80	73	60	59	47	62	63	57	55	58	62	61	68	65	67	72	67	68	41	35	54	62	65	56	45	51	56	62	57	60
	Minimum	45	48	41	36	36	42	39	37	28	27	27	33	35	50	51	52	50	42	43	34	31	43	40	40	40	41	47	38	45	40
Marysville §§	Maximum...	78	63	55	48	47	63	57	55	55	58	61	62	68	67	67	68	61	67	40	32	52	53	57	52	52	51	57	56	55	71
	Minimum...	39	39	32	32	31	33	33	27	25	23	25	24	32	31	43	41	41	34	35	28	28	30	34	35	36	37	37	32	38	34
Oregon	Maximum	73	66	62	53	53	58	52	52	50	53	56	56	63	61	60	63	63	58	56	38	46	50	55	49	48	48	53	53	53	55
	Minimum	40	45	32	32	34	38	31	27	28	25	28	33	36	48	42	42	41	37	29	28	28	37	36	34	39	38	45	32	41	36
St. Joseph	Maximum	79	67	70	60	47	60	59	57	57	60	63	63	68	63	64	68	63	61	55	34	55	55	61	53	49	50	58	58	60	61
	Minimum	41	42	36	37	36	40	40	33	31	30	30	37	38	51	50	48	48	43	33	31	32	42	41	38	42	40	42	36	45	40
Trenton	Maximum	75	70	60	56	52	59	56	54	52	54	58	55	62	67	68	67	63	66	60	35	50	52	58	55	50	57	59	57	56	57
	Minimum	46	44	38	35	33	42	40	28	26	27	26	32	35	47	54	50	48	44	33	30	30	39	39	42	41	41	46	48	44	39

[illegible] days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is cha

the preceding day. [illegible]


NO RAIN
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches
M G

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR APRIL, 1918, AT THE UNIVERSITY
SOURI, COLUMBIA, MO

(See Precipitation and Temperature Data in Climatological Tables, pages 29 and 30.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude, 38° 57'. Longitude: 92° 20'. Elevation, 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast, distance, 180 feet. Evaporation observations began April 1, 1916, 8 a. m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau sta
described in Circular L. Horizontal distance of the anemome
pan, 2 inches. Height of cups of anemometer above rim o
inches. The instrument shelter is [illegible] feet southeast of the pa
of thermometers above ground, 11 feet. Distance of rain gage
2.6 feet. The ground in the immediate vicinity of the pan slo
north, average 5 per cent grade. The soil is covered by blue
being part of the University campus. There are no bodies of
nor are there any irrigation projects under way nearby. The
topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervisin
being George Reeder, Meteorologist and Section Director. The
tions in the table herewith, were taken by Orlin R.
observer, Weather Bureau. This is one of the "Class A" sta
signed to furnish practical information relative to evaporation.
complete climatic records have been made at Columbia, Mo.,
Weather Bureau for about 28 years. These records are publishe
are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for April, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	3
Daily evaporation	.148	166	.183	.093	.187	.116	.043	.172	.143	.132	.175	.098	.066	.143	.167	.000	.166	.161	.172	.059	†.009	.036	.159	.201	.077	.035	.069	.030	.213	.0
Daily wind movement	61	40	92	81	6	70	31	61	66	68	79	49	26	45	52	58	96	14	59	108	58	54	57	64	84	45	30	53	89	

*Total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian summer

OBSERVERS' REMARKS.

Amoret---This has been a cold month. Crops need rain.

Avalon---There is plenty of moisture in the soil; warmth and sunshine needed.

Cliftan Hill---Hail fell on the 2d. Snow on the 20th and 21st.

Caruthersville---Warmth and sunshine are needed.

Gallatin---There was high wind nigot of the 8th.

Grant City---The weather has been favorable for farm work.

Kidder---It has been cold the entire month; warm, sunshiny weather is needed. Truck backward.

Liberty---There was a heavy snow on the 19th and 20th.

Maryville---High wind prevailed all day of the 2d.

Fayette---A cold, retarding month.

Kirksville---Sleet, snow, and rain fell on the 20th.

Oakfield---There was hail on the 2d, and 16th.

Unionville---Thunderstorm on the 14th; snow on the 19th and 20th; high wind on the 28th.

Warrenton---Warm sunshiny weather is needed.

Lockwood---Everything is favorable in this locality.

St. Louis---Hail fell from 9.00 to 9.20 p. m. on April 2d; the stones were small, the greatest diameter measuring about one-fourth inch; there was no damage. During the evening of the 16th, from 6.57 p. m. to 7.00 p. m. hail fell in St. Louis. The path of the storm seemed to be almost west to east, and along the southern edge of the city; its length was about six miles. The hail was heavier in South St. Louis, where the stones were about one-half inch dimension, of irregular sha
was considerable damage to young gardens and leaves of tre
window glasses were broken.

Springfield---The oats crop and gardens of this vicinity wer
damaged by hail early the morning of April 27th. The heavie
parently occurred in the northwest part of the county, where
lasted about two hours. Oats, gardens, and other truck w
into the ground. Wheat was not damaged to any extent. Th
the hail was about 5 miles wide; some damage was done to fruit
damage will not materially affect the yield, as blossoms are thi
fruit trees. No hail fell in the city of Springfield.

Two tornadoes occurred on April 2d. One passed through
and Danville, and to the south of Florence, all in Montgomer
from 6.00 to 6.30 p. m. Three persons were killed, nine were
and property damaged to the extent of over $40,000. At Mi
fine churches, a school house, a 22-room hotel in course of con
and numerous smaller structures, were either destroyed or dama
path of the storm varied from one-eighth to one-half mile in
direction was generally from west lo east. The other tornado
about 6.30 p. m. in east-central Stoddard County, Hunters
Grayridge being the points of greatest damage. Three pers
killed, five injured, and property damage estimated at $200,000.
new sawmill and stave factory at Huntersville was demolish
track of the storm was from southwest to east and varied in wi
one-fourth to one and one-half miles.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, Chief

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

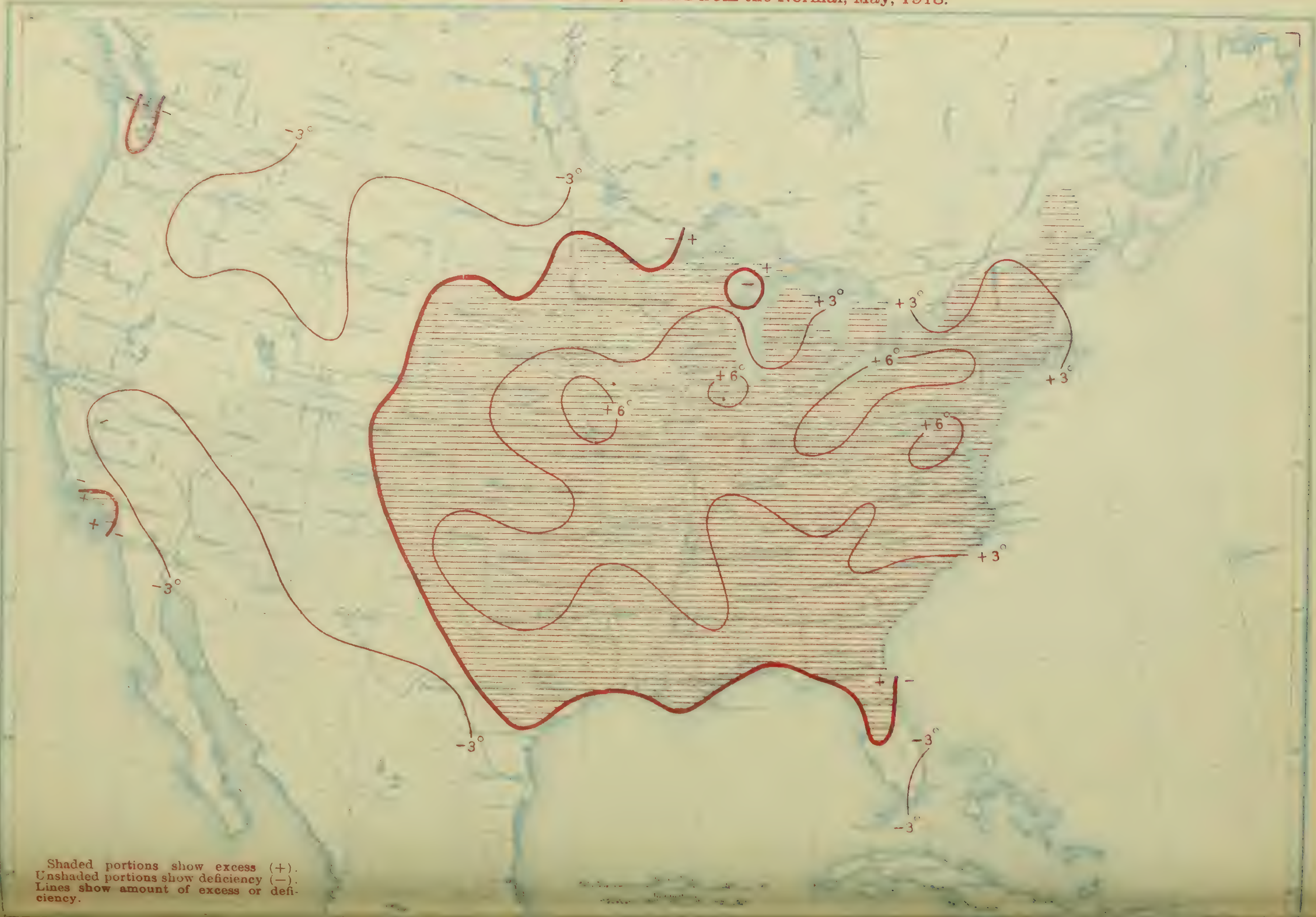
MAY, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JUNE 24, 1918.

Departure of the Mean Temperature from the Normal, May, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XII. Columbia, Mo., May, 1918. No. 5.

GENERAL SUMMARY.

. 1918, was generally favorable for farm work and crop . The month was warmer than the normal, and was o warmer than May, 1917. All parts of the State re- warmth in excess of the normal, but the northern half rmer than the southern half.

precipitation, for the State as a whole, was slightly than the average. In the northern divisions, however, ere more rainy days and the rains were heavier, as a thing, than in the southern divisions. In the south- plain there was quite a marked deficiency.

were no material wind or hail damages during the All streams, save the upper part of the Grand River, d within their banks.

TEMPERATURE.

monthly mean temperature for the State, as determined e records of 66 stations, was 68.3°. The mean depart- n the normal for 62 stations having 10 or more years' vas plus 3.8°. The 1st was the coldest day; 32° or low- red at many stations, and killing frost was more or less in the Ozark Plateau; the weather was not so cold in thwestern and northeastern sections. Temperatures of igher were general on one day only, the 30th, but oc- scatteringly on two or three days. Except on the 1st, n the 10th to the 14th, and 22d, and 23d, the mean ture was constantly above normal.

PRECIPITATION.

erage precipitation for the State, 82 stations reporting, was 5.49 he departure from the normal for 73 stations having 10 or more cord was plus 0.68 inch. Excessive rains on the 10th, 11th, and e southeastern lowlands caused some damage. The greatest n any 24 consecutive hours was 5.25 inches, at Jackson on the e greatest monthly amount was also at Jackson, 11.53 inches.

EVAPORATION.

tal evaporation for the month, at Columbia, Mo., was 5.26 e total rainfall, 3.95 inches; the total wind movement over the f the pan was 1,120 miles, and the mean temperature, 68.8°. he same month 1917, these data were, in order named, 4.45 .59 inches; 1,331 miles, and 59°.

WIND.

vailing winds were from the south. The average wind move- 8,144 miles, based upon the records of 8 stations equipped nometers. Strong winds prevailed on the 9th, and locally on nd 11th.

SUNSHINE AND CLOUDINESS.

rage number of clear days for the State was 16, or slightly rmal. The average number of hours of sunshine for the State or about 69 per cent of the possible and about 6 per cent above

MISCELLANEOUS PHENOMENA.

ense, mostly along the Mississippi River---8th, 13th, 14th, and osts, light---1st, 2d. Heavy---1st. Killing---1st. Hail---8th, 21st, 22d, and 23d. Halos, lunar---16th, 21st, 23d, and 25th. , 4th, 15th, 17th, 19th, 20th, 21st, 24th, and 25th. Thunder- cal---6th, 7th, 8th, 11th, 13th, 24th, and 31st. More or less 9th, 12th, 17th, 19th, 21st, 22d, 23d, 27th, 28th, and 29th.

TA FOR JANUARY, FEBRUARY AND MARCH, 1918.

: Clifton Hill---Maximum temperature and date, 48° on the th. Palmyra---Maximum temperature, 42° on the 1st. St. ---Mean minimum temperature, 3.5°; monthly mean, 13.6. Mean maximum temperature, 29.3°; mean monthly, 17.2°. ng---Mean maximum temperature, 30.9°; mean monthly, 21.3°. Fulton---Total snowfall, 16.1 inches. Lamonte---9.0 inches. Keytesville---Days with .01 inch or more precipitation, 10. Lexington, 5.

February: Koshkonong---Mean minimum temperature, 27.8; monthly mean, 41.7°. Liberty---Mean minimum, 24.5; monthly mean, 37.8°. Tarkio-- Monthly mean, 29.4°. Clinton---Monthly mean temperature, 35.9. Warrenton---Highest temperature, 74° on 24th.

March: Koshkonong---Days with .01 inch or more precipitation, 5.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	29.96	78	......	301	68	6,156	8.3	39	s.	9
Hannibal	29.97	77	......	......	......	8,077	10.9	46	w.	9
Kansas City	29.91	70	51	304	68	10,184	13.7	52	w.	9
St. Joseph	29.90	70	51	287	64	7,568	10.2	51	nw.	9
St. Louis	29.99	76	67	309	70	11,120	15.3	51	sw.	6
Springfield	29.98	78	64	326	74	8,508	11.4	46	w.	9
Cairo, Ill	30.02	77	63	......	......	6,338	8.5	57	sw.	11
Keokuk, Iowa	29.96	74	62	311	70	6,904	9.3	40	sw.	9

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	62.1	−2.3	93	30	5.35	+0.58	......	0	5	....	....	....
1889	63.5	−0.9	96	28	6.56	+1.79	......	0	5	....	....	....
1890	62.8	−1.6	96	32	3.47	−1.30	......	0	6	....	....	....
1891	61.5	−2.9	97	28	4.26	−0.51	......	0	8	....	....	....
1892	60.7	−3.7	91	28	7.80	+3.03	3.90	0	17	5	9	17
1893	61.8	−2.6	94	30	5.89	+1.12	5.83	0	10	11	11	9
1894	63.7	−0.7	95	22	3.99	−0.78	4.20	0	8	13	11	7
1895	64.6	+0.2	103	28	4.08	−0.69	3.43	0	9	13	12	6
1896	70.1	+5.7	96	32	9.09	+4.32	4.66	0	12	12	12	7
1897	62.4	−2.0	93	28	2.56	−2.21	3.82	0	7	16	11	4
1898	65.2	+0.8	97	31	7.90	+3.13	5.50	0	14	12	10	9
1899	66.9	+2.5	96	34	6.26	+1.49	5.28	0	12	10	13	8
1900	66.3	+1.9	97	29	3.69	−1.06	4.00	0	10	14	11	6
1901	63.8	−0.6	98	30	1.47	−3.30	3.04	0	6	15	10	6
1902	69.4	+5.0	98	39	5.03	+0.26	4.35	0	11	13	11	7
1903	65.1	+0.7	92	23	7.10	+2.33	3.10	0	15	9	10	12
1904	63.1	−1.3	95	32	5.03	+0.26	4.33	0	12	13	10	8
1905	64.9	+0.5	94	31	4.87	+0.10	4.55	0	10	12	11	8
1906	66.3	+1.9	98	27	2.16	−2.61	3.83	0	7	15	10	6
1907	59.5	−4.9	91	17	5.56	+0.79	4.33	0	16	14	6	11
1908	66.1	+1.7	96	24	6.92	+2.15	5.65	0	12	12	10	9
1909	63.3	−1.1	96	23	5.34	+0.57	5.26	0	9	15	9	7
1910	60.1	−4.3	94	32	6.62	+1.85	4.30	0	13	11	8	12
1911	68.8	+4.4	101	27	1.55	−3.22	2.06	0	5	19	7	5
1912	67.6	+3.2	97	30	3.86	−0.91	4.90	0	7	18	8	5
1913	65.8	+1.3	101	33	3.65	−1.93	2.95	0	8	16	7	8
1914	66.6	+2.0	98	31	1.47	−3.40	3.00	0	5	17	9	5
1915	63.7	−1.4	97	30	7.86	+3.04	7.10	0	12	12	7	12
1916	65.6	+0.7	96	33	5.61	+0.89	4.10	0	11	15	8	8
1917	58.7	−6.2	91	30	4.33	−0.47	2.60	0	10	15	7	9
1918	68.3	+3.8	100	28	5.49	+0.68	5.25	0	10	16	8	7

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	3.81	−0.51	2.25	0	4	22	3	6	.....	Wm. R. Bennett.
Boonville	41	4.34	−0.94	1.56	0	9	18	3	10	s.	C. Randecker.
C. Girardeau	11	11.17	+7.45	5.20	0	9	22	1	8	s.	D. L. Albert.
Glencoe	1	....	....	....	......	..	..	..	..	......	L. M. Beard.
Hermann	44	6.36	+2.06	2.60	0	9	15	7	9	se.	E. J. Maushund.
New Madrid	24	7.19	+2.80	3.29	0	14	20	7	4	sw.	Miss Josie Smith.
Osceola	18	2.48	−4.48	0.66	0	10	17	4	10	......	Wm. E. Mathews.
Pacific	1	5.16	....	1.35	0	9	22	0	9	......	Mark Waters.
Steelville	16	4.99	+0.66	1.62	0	8	23	0	8	w.	F. Kreamelmeyer.
Tuscumbia	1	4.11	....	1.21	0	10	13	8	10	s.	C. B. Wright.
Union	1	6.14	....	2.22	0	10	13	9	9	sw.	J. Wm. Keller.
Valley Park	1	4.06	....	1.13	0	10	20	4	7	s.	H. J. Lucksinger.
Waverly	3	4.61	....	1.08	0	12	13	12	6	sw.	J. W. Cauthorn.

Climatological data for May, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation, in inches: Total	Departure from the normal	Greatest in 24 hours	Total snowfall	Number of days: With 0.01 or more	Clear	Partly cloudy	Cloudy	Prevailing wind direction	Observers
Northeast Plain.																				
Brunswick	Chariton	650	37	68.0	+5.6	96	8	30	1	[illegible]	[illegible]	[illegible]	[illegible]	0	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Clifton Hill	Randolph	731		69.0	+1.8	94	30	[illegible]	1	[illegible]	5.51	[illegible]	[illegible]	0	12	13	13	[illegible]		[illegible]
Columbia	Boone	784	27	68.8	[illegible]	90	30	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	0	12	[illegible]	[illegible]	9		[illegible]
Fayette	Howard	725	32	67.9	+3.1	90	9	[illegible]	1	[illegible]	[illegible]	+0.22	[illegible]	0	20					[illegible]
Fulton	Callaway	848	13	69.4	+4.3	90	30	[illegible]	1	[illegible]	[illegible]	+1.12	[illegible]	0	4	[illegible]	[illegible]	4	[illegible]	[illegible]
Gorin	Scotland	700	28								[illegible]	[illegible]	[illegible]	0	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Marion	534	24	68.2	[illegible]	93	25	[illegible]	1	30	[illegible]	[illegible]	[illegible]	0	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City	Cole	557	31	68.6	[illegible]	90	30	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	0	10	21	3	[illegible]	[illegible]	[illegible]
Keytesville	Chariton	660	4								6.61		[illegible]							[illegible]
Kirksville	Adair	969	25	66.3	[illegible]	86	9†	31	1	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Pike	469	39	69.2	[illegible]	88	28	31	1	[illegible]	[illegible]	[illegible]	[illegible]	0	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon	Macon	875	19	66.2	[illegible]	91	30	36	1	[illegible]	[illegible]	[illegible]	[illegible]	0	8	7	[illegible]	[illegible]	se.	[illegible]
Mexico ‖	Audrain	797	39	67.6	+3.1	91	30	[illegible]	1	[illegible]	1.78	[illegible]	[illegible]	0	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Franklin	793	36	69.6	[illegible]	90	30	34	1	[illegible]	1.78	[illegible]	[illegible]	0	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Palmyra	Marion	652	5	67.6	+1.2	90	30	35	1	[illegible]	4.57	+0.17	[illegible]	0	8	21	[illegible]	[illegible]	sw.	[illegible]
St. Catherine	Linn	850	4	66.8		86	25	34	1	[illegible]	[illegible]		1.34	0	10	[illegible]	[illegible]	1	[illegible]	[illegible]
St. Charles	St. Charles	456	39	69.2	[illegible]	90	30	34	1	[illegible]	3.76	+0.49	[illegible]	0	8	[illegible]	[illegible]	[illegible]	[illegible]	L. C. [illegible]
St. Louis (1)	St. Louis City	717	46	70.8	+4.3	90	30	43	1	[illegible]	[illegible]	+0.96	[illegible]	0	9	1	[illegible]	[illegible]	s.	[illegible]
St. Louis (2)	do.	578	5	70.2		91	30	38	1	29	3.84		[illegible]	0	10	[illegible]	[illegible]	[illegible]	s.	[illegible]
Shelbina	Shelby	775	25								4.22	−0.94	[illegible]	0	11					[illegible]
Steffenville	Lewis	650	24	66.6	+2.3	91	25†	34	1	[illegible]	[illegible]	[illegible]	2.25	0	11	[illegible]	[illegible]	[illegible]	sw.	[illegible]
Unionville	Putnam	1,072	24	65.1	+2.8	90	30	35	1	[illegible]	9.35	[illegible]	[illegible]	0	11	[illegible]	[illegible]	7	s.	[illegible]
Warrenton	Warren	865	26	68.6	[illegible]	92	30	[illegible]	1	40	9.12	[illegible]	[illegible]	0	9	[illegible]	[illegible]	[illegible]	s.	[illegible]
Keokuk, Iowa	Lee, Ia.	574	46	67.8	[illegible]	88	25	37	1	[illegible]	6.72	+2.47	2.47	0	12	12	11	5	s.	U. S. Weather B
Section means and extremes				68.2	[illegible]	92	30	31	1	[illegible]	[illegible]	+0.54	1.32	0	11	[illegible]	10	7	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	75.7	+6.4	100	30	41	1	41	8.56	[illegible]	[illegible]	0	7	22	5	4	s.	H. L. Averill.
Doniphan	Ripley	341	12	70.9	+4.1	92	30	35	2	40	8.00	[illegible]	[illegible]	0	7	22	2	7	s.	W. W. [illegible]
Jackson	Cape Girardeau	458	26	70.2	+4.4	94	28†	30	1	45	11.53	[illegible]	5.25	0	[illegible]	[illegible]	16	6	s.	[illegible]
Marble Hill	Bollinger	420	25																	[illegible]
Patton (near)	Bollinger	500	2								10.20		[illegible]	0	6					George L. Ellis
Poplar Bluff	Butler	339	13	69.2	+0.5	92	28	35	1†	41	[illegible]	[illegible]	1.79	0	10	17	2	12		Miss [illegible]
Cairo, Ill.	Alexander, Ill.	359	44	71.2	+3.7	91	30	40	1	26	5.15	+1.32	3.01	0	10	12	[illegible]	[illegible]	s.	U. S. Weather B
Section means and extremes				71.4	+3.8	100	30	30	1	45	8.50	+4.04	5.25	0	8	17	[illegible]	[illegible]	s.	
Ozark Plateau.																				
Birchtree	Shannon	1,078	23	69.0	+3.6	88	30	35	1	36	7.88	+3.82	3.10	0	6	22	[illegible]	5	s.	V. H. Kirkendal
Bolivar	Polk	1,071	29	68.0ᵃ	+2.9	88	8†	34	1	[illegible]	4.62	[illegible]	1.63	0	6	21	7	3	sw.	A. C. [illegible]
Cassville	Barry	1,500	6	70.2		92	8	31	2	[illegible]	4.04	−1.65	1.19	0	6	23	[illegible]	[illegible]	s.	William [illegible]
Crocker ‖	Pulaski	1,126	6	69.4ᵇ	[illegible]	83	17†			32	3.10	[illegible]	1.76	0	2	23	[illegible]			Rev. W. R. [illegible]
Dean	McDonald	1,000	18	68.2	+2.2	91	8	29	1	42	3.87	[illegible]	2.18	0	10	21	3	5		H. E. [illegible]
Eldon	Miller	934	16	66.8	+1.7	91	8	34	1	36	4.08	−0.71	1.20	0	9	7	19	5	s.	E. H. Sheppard.
Fruit City	Reynolds	1,150	4																	R. C. Watson.
Gano	Dent	1,250	13	68.2	+2.4	91	30	32	1	32	4.91	+0.53	3.00	0	7	17	10	4	s.	A. C. [illegible]
Goodland	Iron	1,000	12	67.6	+2.7	90	30	29	1	44	7.24	+2.89	2.58	0	7	18	10	3	s.	F. M. Adams.
Hollister	Taney	735	8	66.4	−1.1	94	8†	30	1	44	6.25	+2.53	1.40	0	6	21	6	10	s.	W. P. [illegible]
Houston	Texas	1,280	24	68.6	+3.7	87	30	32	1	35	3.57	−0.55	1.25	0	7	25	4	4	se.	R. F. Harmon.
Ironton	Iron	925	39	68.6	+1.0	89	30†	29	1	[illegible]	6.63	+1.94	2.50	0	11	11	6	14	s.	Arcadia College.
Koshkonong ‖	Oregon	958	16	70.0	+3.0	90	7†	36	1	33	9.99	+5.48	4.12	0	7	21	4	6	sw.	E. M. Hitt
Lebanon	Laclede	1,265	28	68.2	+2.2	90	7†	33	1	36	3.90	−1.64	1.60	0	7	18	9	4	s.	Leonard L. Dick
Lockwood	Dade	1,078	22	68.1ᶜ	+3.6	91	8†	37	1	33	[illegible]	+0.49	2.20	0	9	11ᶜ	8	7	sw.	C. S. Crow
Mountain Grove	Wright	1,490	18	66.6	+2.2	87	8†	31	1	39	7.03	+2.46	2.15	0	10	9	12	10	s.	Mo. Fruit Exp. St
Mount Vernon	Lawrence	1,480	38																	C. L. White.
Neosho	Newton	1,011	34	68.9	+2.6	90	8†	30	1	41	4.99	−1.14	1.49	0	12	22	5	4	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	69.0	+4.4	93	28	32	1	45	4.05	−0.93	1.85	0	6	15	15	1	s.	Prof. Elias G. Ha
Springfield	Greene	1,350	29	68.6	+4.0	89	8	39	1	33	4.19	−1.36	1.88	0	10	18	11	2	s.	U. S. Weather Bu
Section means and extremes				68.4	+2.6	94	8†	29	1	45	5.32	+0.70	4.12	0	8	18	7	6	s.	
Southwest Plain.																				
Amoret	Bates	831	8	68.7	+4.9	91	27†	33	1	42	2.42	−2.80	0.69	0	8	11	9	11	sw.	Darby Fruit Farn
Appleton City	St. Clair	853	26	69.2ᵈ	+3.9	88	8†	38	1	31	2.58	−3.09	0.84	0	8	11ᵈ	15ᵈ	1ᵈ	sw.	W. G. Bigelow.
Clinton	Henry	765	30	71.5	+6.3	92	8	34	1	40	4.99	−0.52	1.60	0	9	11	15	5	sw.	A. E. Derwent, M
Harrisonville	Cass	912	11	67.8	+3.7	89	8†	34	1	37	2.86	−2.02	0.91	0	11	8	1	22	sw.	A. J. Sharp.
Lamar	Barton	980	36	70.0	+4.0	91	8†	35	1	38	4.05	−1.31	1.22	0	7	17	2	12	s.	Joe W. Springer.
Lamonte	Pettis	863	28	67.6	+2.1	90	30	34	1	38	5.54	+0.57	2.69	0	8	16	11	4	sw.	J. Ed. Hall.
Marshall	Saline	779	26	68.0	+3.8	89	30	34	1	37	3.85	−1.17	1.35	0	8	10	12	9	sw.	Dr. W. H. Black.
Nevada	Vernon	860	23																	George A. Kaup
Warrensburg	Johnson	883	38																	Geo. H. Collins.
Warsaw	Benton	715	12	71.3	+5.3	96	8	30	1	54	2.57	−2.60	0.62	0	9	11	19	1	sw.	J. R. Smith, M. D
Section means and extremes				69.3	+4.2	96	8	30	1	54	3.61	−1.62	2.69	0	8	12	11	8	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	68.8	+5.5	87	19†	43	1	33	5.06	−0.15	2.15	0	8	15	14	2		F. G. Ashbaugh.
Bethany	Harrison	916	27	69.2	+6.8	90	19	28	1	40	6.16	+1.04	1.80	0	13	12	10	9	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	67.6	+6.5	89	25	33	1	37	3.50	−2.00	1.00	0	8	21	1	9	s.	Dr. J. R. Campbe
Conception	Nodaway	982	32	68.6	+6.9	91	8	37	1	37	8.95	+4.25	2.36	0	11	10	17	4	sw.	Fr. Adelhelm Hes
Gallatin	Daviess	803	17								1.83		1.74	0	12	14	11	6	s.	Robert R. Wynne
Grant City	Worth	1,131	21	67.8	+5.7	90	4	33	1	38	7.83	+3.11	3.45	0	9	20	8	3	s.	W. H. Campbell
Kansas City	Jackson	963	28	69.1	+4.6	89	30	44	1	41	3.77	1.31	1.51	0	3	11	11	6	s.	U. S. Weather Bu
Kidder	Caldwell	1,020	26	69.0	+6.0	89	19	37	1	33	5.02	−0.53	2.10	0	11	21	5	5	sw.	J. F. Sharp.
Lexington	Lafayette	688	35	69.4	+4.9	89	30	39	1	32	4.62	0.56	1.50	0	11	15	0	16	s.	J. W. Keithley.
Liberty	Clay	861	28	70.1ᶜ	+5.4	93	8	36	1	40	5.16	+0.31	2.20	0	10	15	11	5	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	65.7	+4.7	91	8	34	1	46	8.15	+2.22	2.55	0	9	16	7	8	e.	J. R. Brink.
Oregon	Holt	1,048	61	66.5	+3.2	89	8†	36	1	34	4.24	−0.66	1.56	0	10	13	14	4	s.	Tom Curry.
St. Joseph	Buchanan	967	45	69.4		92	8	40	1	42	6.71	+2.57	2.06	0	13	10	15	6	s.	U. S. Weather Bu
Tarkio	Atchison	976	5	68.4	+4.8	92	8	34	1	45	6.27	+1.46	2.94	0	10	20	6	5	sw.	John F. Frazier.
Trenton	Grundy	822	22	67.8	+3.9	87	9†	31	1	31	7.21	+1.74	3.22	0	11	11ᵃ	9ᵃ	7ᵃ	s.	W. H. Estes.
Section means and extremes				68.4	+5.3	93	8	28	1	45	5.92	+0.80	3.45	0	11	15	9	7	s.	
State means and extremes				68.3	+3.8	100	30	28	1	51	5.49	+0.68	5.25	0	10	16	8	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re[illegible] used in computing section or division means.

[illegible] appearing in the table indicate number of days missing; for example, ᵇ represents two days, etc.

† Also on earlier dates. ‡ Received too late to be included in means and summaries. ‖ Post office addresses of these stations are as follows: Oakfield, Pacific [illegible] No. 1, of Dean, Anderson; of Gano, Salem R. F. D. No. 5, of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for May, 1918.

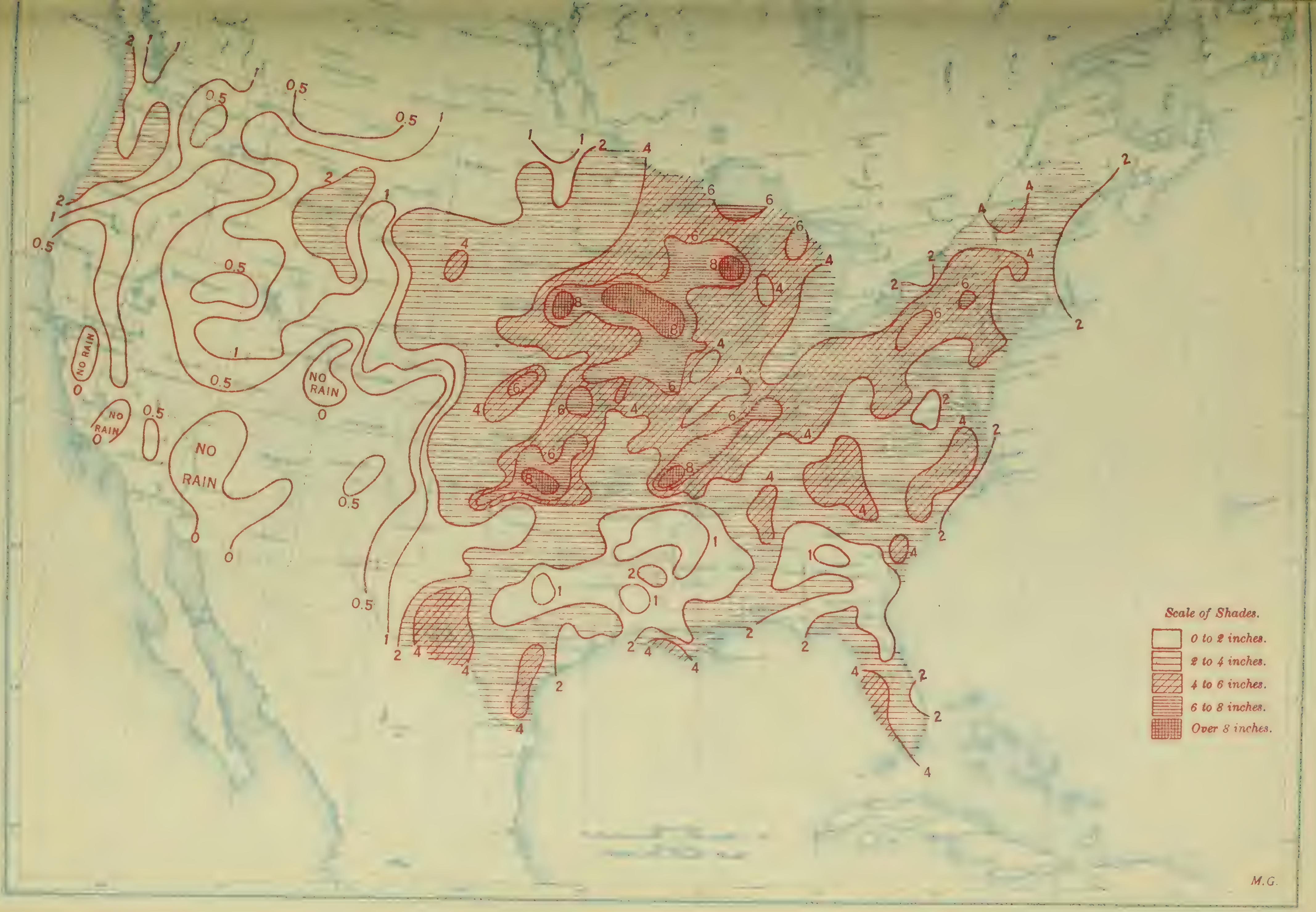
Stations	Watersheds.	Day of month																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
st Plain.																																	
	Missouri							.36					.16	.11					.80		.28			1.56					.32	.65	.07		4.34
	Grand							.62				.06	.42	.17					.50		.22		.12	1.92	.63			.04	.12	.70	.12		5.94
H.ll	Chariton						.70						.59	.12				.76	.03		.28		1.90	.75	.09			.23	.11			.04	5.51
	Missouri				T.	T.	.74	T.		T.		.27	.20	.02				.17		.30	.01		1.77	.38				.02	.04	.03			3.95
	do						.30						.40					.82		.06			1.10	.58				.26	.50	.23		.18	4.13
	do						.23	.01		T		.22	.15	.06	.01			.08	.30	.05	.60		.55	2.30					.93	.01			5.80
	Meramec																																......
	Mississippi						.86						.42	.21				1.06		.08		.04	.24	.19	.01			1.74	.30	1.20			6.26
	do					T	.44			T.		.01	.27	.14				.80		.81			.81	.05	T.			1.75	.86	.27			6.21
	Missouri							.40				.68	.28	.01	.38				.24		1.75			2.60						.02			6.36
	do							.52				.25	.45	.05	.12				.28		.88			2.05	.10					.50			5.20
	Chariton						.54					.02	.58	.02				.10	.05	.18			1.75	1.06				.23	1.50	.23		.05	6.61
	Mississippi						.79			.02			.16	.25				.44	.33	.08		.04	.66	.21				.29	.62	.21			4.10
	do						.44				.04	.24	.64	T				.04		.16	.18		1.26	.30				.08	.24	.27			3.89
	Chariton																		.58		.64		.01	1.18	.18				.38	.71	.04		3.72
	Mississippi										T.	.25	.52	.16	T.				.55		1.10			1.46	.12				T.	.51	.17		4.78
	Meramec											1.08	1.21	.15							.50		.55	1.01						.28			4.78
	do											.82	1.55	.10	.11				.21		.91			.95	.32						.19		5.16
	Mississippi							.40							.21				.76		.75			.67	.11				1.42	.25			4.57
	Grand						1.34			.02		.08	.19	.06				.08	.07	.20		.06	.78	.16	.04			.20	.11	.65		.16	4.20
	Missouri						T			T		1.00	.13	.03					.25		.94		T.	1.20	.12						.09		3.76
	Mississippi						T			T.		1.65	.41	.04			.14	.03	.19	.09		.27	.43			T.							3.28
	do						T.			.01	T.	1.94	.41	.05				.15	.03	.36	.09		.30	.50			T.		T.				3.84
	do						.45						.33	.22	T.			.20		.22		.03	1.03	.18			.22		1.16	.18			4.22
	do						.65			.38		.14	.31	.25				T.			.64	T	.54	.12				1.62	2.25	.20			7.10
	Meramec											.83	.98	.11	.03				.10		.22			1.20	2.22			.05			.40		6.14
	Grand							.62		.03				.25					.30		.15		2.80	.30	.50				2.70	1.40	.30		9.35
	Meramec											.84	1.05	.05	.10				.28		.50		.02	1.13	.07						.02		4.06
	Mississippi							.51				.65	.21	.01					.07		2.85			1.32				.03		.47			9.12
Iowa**	do						.55		.18			T	.52	.10				1.05		.52		T	.06	.02	.01			1.71	1.51	.49			9.72
lands.																																	
	Mississippi								3.00			1.40	5.20	.60					.30	.15	.12	.15			.25								11.17
	do					T.	.85	.35				1.38	4.43	T.					.22	.10	1.23												8.56
	Black							.65	.15		.35	1.65	3.20						.25		1.75												8.00
	Mississippi						.04	2.65				5.25	2.15	.02				.23	.02		.37			.80									11.53
	do																																......
	do						.01	.20	1.90		.58	.01	3.29	.25	.05				.10	.01	.18	.57		.03					.01				7.19
	do							2.30				2.90	3.80			.50	.60							.10									10.20
	Black								.12		.56	.19	4.79	.34	.11				.38	.05	.06	.94											7.57
	Mississippi						.01	1.36		.10	.02	1.80	1.42						.02	.01	.16			.25									5.15
Plateau.																																	
	Gasconade											.96	2.25	.50					.10														3.81
	Black							.56			.80	1.77	3.10						.45		1.20												7.88
	Osage											1.63	.75				.50						.50	.30					.94				4.62
	White						.73		.15			.52	1.19					.42			1.03												4.04
	Gasconade									T.						1.76					1.34												3.10
	Neosho					.02	.34	.11		.07	2.18	.13						.65		.06		.10							.21	T.			3.87
	Osage						.41					.79	.17	.13						.30	.64		1.20	.03	.41								4.08
	Black																																......
	Meramec								.02			1.68	1.72	.10					.28		1.02			.09									4.91
	Black											2.26	2.38	.16					.41		1.91	.05	.07										7.24
	White								.15		1.10	1.25	1.40					1.15			1.20												6.25
	Gasconade								T.	T.	.65	.20	1.25	.15				.22	.15		.95							T.					3.57
	Mississippi							.28		.03		1.55	2.50	.40	.06				.45	.05	1.03	.20		.08									6.63
	Black							T.	.69	.18		.15	2.18	4.12					.57		2.10												9.99
	Osage											1.36	1.60		.02				.19		.62		.03	.08									3.90
	do					T.	.62			1.25		2.20	.47	.05				.41			.25	.05						.05					5.35
Grove	White							.03	.65		.18	1.03	2.45	.07					.49		1.48	.27		.08									7.03
	Neosho																																......
	do					.02	.63		.02		.45	1.49	.96	.03				.48			.30		.29	.01				.31					4.99
	Meramec											1.07	1.85	.08					.26		.55				.24								4.05
	White				T.	T.	.03	.01		.42		1.88	.48	T.				.20		T.	.70	T.	.04	T.				.08	.35				4.19
	Meramec								.23			1.42	1.62	.25					.25		.55			.32	.35								4.99
	Osage							1.21				.50	.72	.05	.03				.04		.51			.90	.08				.07				4.11
st Plain.																																	
	Osage						.69			T.		.24	.45	.01				T.		T.	T.		.25	.08					.23	.47		T.	2.42
City	do					.03	.84					.23	.54	.09				.28											.49	.08			2.58
	do						.88					.20	.38	.10				.50			.12		1.00	1.60						.21			4.99
ville	do						.33	.33		.04			.40	.04	T.						.43		.06	.91					.02	.15	.15		2.86
	Neosho						.47	1.22				.74	.80	.08						.64			.10										4.05
	Missouri						.55						.22	.20				.36					2.69	.15					.50			.87	5.54
	do						.55						.32					.60			.20		1.35	.30					.04	.49			3.85
	Osage																												1.80	.10			
	do						.52	.03				.10	.66	.09					.25		.16		.03	.61	.03								2.48
urg	Missouri																																......
	Osage						.62					.30	.18	.28				.22			.15		.53						.14	.15			2.57
	Missouri						.03	.97					.44	.07	.03						1.04		.60	1.08	.10				.08	.12	.05		4.61
st Plateau.																																	
	Grand						1.20						.20										1.90	.25	.10		.15			1.20		.06	5.06
	do						.55			T.		.08	.03					.35	.05			1.80	.85	.30	.05			.42	.75	.70		.23	6.16
	do							.65					.05						.10				.60	.70	.20					1.00	.20		3.50
	Missouri					T.	.36			.09			T.	T.				.87	.03			1.91	1.34	.41	T.		T.	.52	2.36	.59		.47	8.95
	Grand					T.	.30			.03			.19	.02				.06	.01			T.	1.43	.33			.12	.44	.16	1.74			4.83
	do							.57										.65				3.45	.35	.25				.40	1.17	.40		.59	7.83
City**	Missouri					.02	.23			.02	T.	.04	.16	T.				.20				.03	1.41	.38	T.			.25	.28	.67		.08	3.77
	Grand						.11	.20		.02			.11	.08	.02				.18				.75	.80	.18			.11	.25	2.10	.11		5.02
	Missouri						.02	1.08					.15								.50		.06	1.50	.29			.02	.22	.26	.52		4.62
	do					T.	.30			T.			.35					.35			.05		1.45	.31	.02				.28	2.20		.15	5.46
	do						.24							.18					.71			1.89	2.55	T.	.50	T		1.26	.13	.69		T.	8.15
	do					.04				.08								.72					1.56	.22	.03			.10	.48	.81		.20	4.24
	do					.06	.19	T.		.01		.11	.03	T.				1.32				.94	1.12	.44	T.			.58	.43	.95		.53	6.71
	do						.11			T			.01					.10				2.20	.09	.21			T	2.94		.18	.27	.16	6.27
	Grand					.06	.30			.09			.26	.09				.30				.81	1.04	.38			.13	.42	3.22	.05		.06	7.21

xcept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch
lar Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
fall not recorded.

Daily temperatures for May, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	67	77	81	82	77	77	80	90	88	68	64	63	61	76	84	[illegible]	[illegible]	83	85	70	85	64	69	84	88	84	88	84	87	88	[illegible]
	Minimum	36	38	45	49	57	63	61	59	59	47	48	50	42	46	49	59	66	64	66	56	[illegible]	[illegible]	[illegible]	56	67	70	68	63	65	67	[illegible]
Columbia	Maximum	67	76	80	84	79	77	82	88	86	66	56	58	69	75	84	83	82	84	83	77	87	[illegible]	68	[illegible]	84	86	[illegible]	[illegible]	84	90	[illegible]
	Minimum	35	48	49	59	61	61	61	61	53	49	50	47	44	43	49	[illegible]	[illegible]	62	65	60	[illegible]	[illegible]	55	60	71	68	64	64	68	[illegible]	[illegible]
Fayette	Maximum	64	73	78	80	75	76	81	87	90	65	60	58	63	[illegible]	82	[illegible]	81	84	80	[illegible]	83	70	[illegible]	84	80	86	82	[illegible]	84	88	[illegible]
	Minimum	37	44	50	58	59	63	63	60	56	50	50	50	45	43	57	60	65	62	68	[illegible]	64	58	[illegible]	65	68	68	[illegible]	65	63	68	[illegible]
Hannibal	Maximum	64	76	80	82	79	76	80	84	86	64	55	58	62	71	83	82	84	83	82	71	86	71	72	86	80	84	84	[illegible]	[illegible]	88	[illegible]
	Minimum	36	48	53	57	61	64	62	58	57	52	51	48	43	44	56	58	65	64	61	54	61	57	56	[illegible]	72	72	[illegible]	64	[illegible]	67	[illegible]
Jefferson City §§	Maximum	70	77	82	83	80	73	85	89	87	70	56	59	71	78	83	82	84	82	84	82	[illegible]	78	70	[illegible]	85	[illegible]	[illegible]	84	85	90	[illegible]
	Minimum	35	38	48	52	58	62	64	58	62	50	50	50	43	42	45	[illegible]	60	63	65	62	62	[illegible]	[illegible]	[illegible]	65	[illegible]	68	[illegible]	65	68	[illegible]
Kirksville	Maximum	65	77	82	84	77	75	74	84	86	80	64	60	64	72	83	82	76	84	82	73	82	[illegible]	67	[illegible]	85	[illegible]	[illegible]	82	79	[illegible]	[illegible]
	Minimum	31	46	54	56	59	58	58	54	62	45	45	39	48	42	52	54	62	65	65	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	64	[illegible]
Louisiana	Maximum	64	75	76	82	82	77	78	78	86	85	67	54	58	72	82	82	83	84	80	[illegible]	[illegible]	[illegible]	82	85	86	86	82	88	79	87	[illegible]
	Minimum	31	44	49	56	58	63	64	63	50	52	50	50	49	46	53	50	[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	64	63	68	[illegible]	65	62	64	65	[illegible]
Macon §§	Maximum	69	77	83	86	84	78	69	68	69	69	62	63	65	71	84	84	84	82	88	75	[illegible]	[illegible]	73	84	[illegible]	86	82	88	88	93	[illegible]
	Minimum	36	38	48	50	55	60	60	47	45	51	47	48	44	44	48	56	60	62	[illegible]	46	[illegible]	[illegible]	54	[illegible]	[illegible]	65	67	[illegible]	63	[illegible]	[illegible]
Mexico §§	Maximum	68	77	84	83	84	77	83	88	87	67	53	57	70	75	85	84	84	86	[illegible]	75	[illegible]	70	[illegible]	82	[illegible]	87	[illegible]	90	85	94	[illegible]
	Minimum	35	36	46	51	56	62	63	58	59	49	49	49	43	40	44	56	58	62	62	56	58	[illegible]	63	57	65	65	[illegible]	[illegible]	64	62	[illegible]
Oakfield	Maximum	64	76	84	83	82	76	87	84	88	82	57	55	71	72	[illegible]	82	79	78	86	75	85	[illegible]	69	87	89	88	88	84	87	[illegible]	[illegible]
	Minimum	34	44	54	57	60	62	67	58	70	54	50	49	45	[illegible]	56	59	61	63	60	[illegible]	[illegible]	60	[illegible]	65	73	69	68	67	67	[illegible]	[illegible]
St. Catharine	Maximum	64	74	80	82	78	74	75	85	84	79	62	64	60	75	84	82	78	[illegible]	83	[illegible]	83	77	67	82	86	84	79	77	77	85	[illegible]
	Minimum	34	44	47	53	57	58	50	59	69	46	49	49	40	44	51	58	64	60	64	51	[illegible]	[illegible]	52	63	68	68	[illegible]	62	64	66	[illegible]
St. Louis (1)	Maximum	62	76	81	83	83	76	85	82	88	74	60	57	69	70	80	84	84	76	86	74	86	84	73	88	89	80	[illegible]	90	87	90	[illegible]
	Minimum	43	48	57	59	65	65	67	63	71	54	51	50	48	48	55	63	64	64	62	61	[illegible]	62	58	64	75	[illegible]	[illegible]	72	[illegible]	74	[illegible]
Unionville §§	Maximum	66	80	82	86	82	74	76	84	88	66	68	66	67	75	85	86	82	83	86	[illegible]	83	70	72	[illegible]	88	84	82	86	82	[illegible]	[illegible]
	Minimum	35	36	44	50	56	60	56	54	55	45	40	44	37	39	42	56	57	[illegible]	60	47	[illegible]	50	[illegible]	[illegible]	60	61	[illegible]	58	60	62	[illegible]
Warrenton §§	Maximum	68	79	83	85	83	72	84	86	85	67	52	58	69	75	85	84	84	84	86	75	86	77	69	86	90	88	[illegible]	90	88	92	[illegible]
	Minimum	35	39	47	52	61	62	63	57	59	50	50	50	44	43	48	57	61	63	65	60	59	59	55	56	69	69	66	67	65	68	[illegible]
Southeast Lowlands.																																
Caruthersville	Maximum	75	83	88	90	85	85	83	87	90	87	86	74	80	86	90	92	92	89	89	87	95	94	91	90	96	98	98	98	96	100	[illegible]
	Minimum	41	51	65	49	54	60	65	64	60	63	60	60	48	51	54	59	65	69	65	65	65	62	70	70	76	70	68	68	70	71	[illegible]
Doniphan	Maximum	67	75	79	83	80	77	86	84	87	84	69	73	74	78	80	84	84	82	85	[illegible]	86	87	83	[illegible]	89	89	90	91	89	92	[illegible]
	Minimum	38	35	40	46	54	62	68	62	70	54	55	60	47	52	50	52	58	65	65	66	65	70	65	[illegible]	70	65	66	65	65	68	[illegible]
Jackson	Maximum	68	76	82	86	82	81	82	86	89	82	74	79	74	76	82	88	86	83	87	81	87	89	80	90	92	92	93	94	92	94	[illegible]
	Minimum	30	33	39	44	51	62	64	60	68	55	53	56	42	38	48	51	64	65	64	60	52	60	63	62	61	64	[illegible]	64	[illegible]	65	[illegible]
Marble Hill	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poplar Bluff §§	Maximum	67	75	80	83	78	77	86	84	87	77	69	75	74	77	81	84	85	81	85	78	81	81	[illegible]	90	88	89	91	92	87	91	86
	Minimum	35	35	36	41	45	50	65	62	62	56	54	55	43	44	51	52	52	64	[illegible]	61	60	62	65	63	63	47	64	64	66	67	67
Ozark Plateau.																																
Birchtree	Maximum	67	74	81	84	80	72	87	83	87	79	69	69	74	80	84	81	78	78	81	75	82	85	80	87	87	85	87	86	85	88	87
	Minimum	35	39	45	48	57	61	64	62	66	48	54	50	40	45	53	54	63	61	64	58	64	65	62	62	62	64	65	63	67	66	69
Cassville	Maximum	69	77	80	81	75	78	89	92	87	83	80	76	76	84	81	78	82	78	82	80	84	87	87	86	87	85	87	87	88	90	85
	Minimum	46	31	40	39	52	67	63	65	65	44	56	45	56	45	72	58	49	59	69	60	63	65	65	63	70	65	63	64	69	79	65
Eldon	Maximum	68	76	80	80	78	75	83	91	85	76	61	62	70	78	81	82	84	82	81	78	84	75	75	85	85	86	86	79	85	89	85
	Minimum	34	40	41	50	55	60	60	55	67	46	46	48	41	42	49	50	59	62	59	54	51	49	44	62	69	63	65	68	64	64	61
Fruit City	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gano	Maximum	64	74	75	77	74	71	80	80	86	80	72	59	60	73	81	79	78	79	84	76	85	82	84	85	88	87	86	90	88	91	86
	Minimum	32	43	49	52	59	61	64	62	68	48	50	48	42	46	51	52	62	61	63	58	59	62	58	62	70	65	63	62	64	65	68
Hollister	Maximum	64	74	76	78	80	82	92	94	86	82	80	78	76	78	80	82	84	82	80	78	82	88	90	86	88	90	92	92	94	94	92
	Minimum	30	36	38	40	44	46	48	60	48	42	40	44	42	48	40	42	46	50	48	52	54	56	58	56	60	62	56	58	56	58	60
Ironton §§	Maximum	67	76	82	84	81	75	87	87	83	76	75	69	74	77	82	83	82	79	85	75	85	88	75	87	88	87	88	87	85	89	87
	Minimum	29	32	44	48	56	62	64	60	51	69	52	61	36	43	45	46	56	62	61	59	64	65	61	59	63	68	62	62	62	64	67
Koshkonong	Maximum	67	75	81	84	80	70	90	86	86	81	70	69	74	81	83	82	82	81	80	82	84	84	85	87	86	86	89	89	89	90	88
	Minimum	36	42	49	53	58	61	65	63	66	48	55	54	45	49	54	55	56	61	55	58	62	66	63	66	68	64	64	65	66	66	68
Lebanon §§	Maximum	67	65	80	83	72	75	90	90	85	72	65	60	72	82	81	82	79	82	84	76	85	80	80	86	85	86	87	88	87	90	81
	Minimum	33	35	45	49	50	61	63	61	62	47	47	49	44	46	51	55	56	63	63	60	60	63	60	69	67	66	67	67	66	67	67
Mountain Grove §§	Maximum	65	71	77	78	76	71	86	87	83	71	65	63	71	78	78	78	77	78	80	70	82	83	79	84	83	84	84	85	83	87	84
	Minimum	31	32	42	49	53	57	61	50	64	48	46	55	42	44	48	56	57	60	63	58	58	63	62	60	65	64	64	64	65	64	66
Neosho	Maximum	71	76	80	78	72	78	87	90	89	84	67	64	75	81	82	81	81	80	81	83	84	83	85	86	86	85	86	87	87	90	88
	Minimum	30	46	40	48	56	57	59	61	68	46	54	49	43	46	51	52	64	60	66	60	62	62	63	64	66	62	62	62	65	62	64
Rolla §§	Maximum	69	77	81	82	79	75	88	89	87	73	62	57	72	78	85	83	80	82	84	78	84	82	76	89	88	88	89	93	89	92	88
	Minimum	32	32	46	49	52	62	64	62	63	49	49	52	43	43	43	57	58	63	66	60	60	64	58	58	65	67	67	67	66	70	69
Springfield	Maximum	65	72	77	74	73	75	85	89	83	68	63	58	71	77	78	79	76	81	80	71	82	79	81	84	86	83	84	83	80	85	83
	Minimum	39	46	53	56	60	59	66	61	50	46	55	45	48	52	59	59	63	63	65	59	64	64	61	68	70	68	69	65	69	68	70
Southwest Plain.																																
Amoret	Maximum	68	76	80	77	71	81	83	89	88	81	66	68	73	83	83	84	81	80	84	81	84	75	81	86	89	88	91	91	82	90	90
	Minimum	33	42	46	52	57	56	62	55	66	39	50	48	44	49	55	56	66	51	62	60	53	56	55	76	71	66	54	60	62	65	70
Appleton City	Maximum	66	73	77	76	72	77	81	88	87	81	66	64	72	80	81	81	79	81	80	...	...	...	...	85	86	87	87	86	81	88	85
	Minimum	38	43	46	53	57	59	65	59	69	44	53	50	46	50	56	59	67	62	67	...	...	...	...	68	74	68	68	65	67	68	72
Clinton	Maximum	70	76	81	80	76	79	89	92	88	80	65	67	69	83	84	85	80	84	83	83	86	78	81	86	89	89	89	86	85	90	87
	Minimum	34	41	45	55	57	59	64	58	70	43	53	50	45	43	55	55	65	61	68	60	64	58	56	67	70	66	65	64	67	66	73
Harrisonville §§	Maximum	67	77	81	80	73	79	81	89	87	66	63	76	73	82	83	84	79	83	87	79	84	74	75	86	88	88	87	83	83	89	85
	Minimum	34	38	44	47	56	57	58	57	59	43	43	49	47	49	50	58	58	62	62	58	58	64	55	55	65	67	64	61	61	65	69
Lamar §§	Maximum	68	77	80	77	68	80	87	91	85	70	60	67	83	82	83	76	83	80	80	80	84	80	86	87	87	88	89	87	88	91	87
	Minimum	35	42	44	57	57	57	67	59	68	42	54	49	45	56	57	59	59	66	61	59	65	64	61	68	70	68	67	65	67	67	70
Lamonte	Maximum	66	75	71	80	79	78	82	81	85	70	67	63	70	68	82	83	80	82	77	78	79	71	69	82	86	85	86	85	85	90	86
	Minimum	34	43	41	54	55	58	63	55	68	50	44	49	45	42	51	59	66	63	67	62	59	59	56	62	65	67	66	61	66	69	67
Marshall	Maximum	67	77	81	82	77	77	82	88	86	79	63	63	69	77	83	83	83	82	83	78	84	75	68	84	87	86	84	84	84	89	84
	Minimum	34	40	44	51	54	59	61	55	69	45	52	48	43	42	53	53	61	62	68	54	63	56	55	64	69	67	66	62	64	67	69
Warrensburg	Maximum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minimum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warsaw	Maximum	75	86	90	92	86	86	94	96	90	78	65	68	70	89	90	92	89	91	89	85	86	80	80	88	90	89	88	87	86	91	88
	Minimum	30	38	36	46	55	62	63	55	70	45	53	50	39	42	58	59	66	62	68	61	65	58	57	68	68	70	64	64	65	63	65
Northwest Plateau.																																
Chillicothe §§	Maximum	65	77	82	85	75	77	80	87	88	68	65	68	65	72	85	84	86	83	88	76	87	70	71	83	89	86	85	82	82	88	85
	Minimum	33	40	50	55	57	60	59	61	62	45	45	50	43	45	49	56	61	61	66	49	51	60	52	58	70	69	65	63	64	61	70
Grant City	Maximum	69	83	87	90	81	79	80	89	82	64	68	71	64	80	88	87	82	78	89	82	87	76	66	84	87	85	84	80	79	88	84
	Minimum	33	45	50	55	56	58	55	56	52	41	43	51	41	46	57	60	63	60	55	58	57	53	50	62	66	65	58	63	64	67	70
Kansas City	Maximum	66	76	80	80	72	78	82	88	87	65	63	64	70	82	82	83	76	79	88	79	84	70	67	84	87	86	86	78	83	89	83
	Minimum	44	50	58	59	60	58	66	62	46	46	52	49	51	52	60	62	65	64	66	58	65	59	55	67	71	69	63	64	64	71	69
Kidder §§	Maximum	66	78	82	83	77	76	77	87	85	76	68	68	65	80	81	84	78	68	89	78	88	68	67	84	87	84	85	85	80	87	84
	Minimum	37	48	52	58	58	60	61	56	70	44	46	50	45	47	57	58	65	63	84	51	65	60	54	66	71	77	65	63	64	68	70
Lexington §§	Maximum	66	77	82	83	76	77	82	88	88	67	65	65	67	80	84	84	82	84	88	80	86	64	68	85	88	86	87	86	83	89	85
	Minimum	39	48	50	58	58	60	62	59	69	45	52	50	47	47	60	57	66	62	68	54	65	62	55	64	72	69	65	62	65	68	71
Maryville §§	Maximum	71	82	85	87	78	75	81	91	90	66	69	68	68	82	85	85	78	79	87	77	85	70	66	84	87	83	84	78	69	87	73
	Minimum	34	36	45	48	56	56	53	57	58	39	39	43	40	40	48	57	58	59	59	48	49	56	50	50	63	62	59	60	63	63	67
Oregon	Maximum	66	76	80	82	73	79	74	89	88	61	63	64	65	78	82	83	77	78	88	78	83	74	63	80	88	89	78	78	74	79	80
	Minimum	36	47	58	57	55	57	58	60	54	39	40	48	41	47	60	60	63	61	67	52	70	50	52	59	68	62	59	61	62	66	64
St. Joseph	Maximum	68	80	84	84	76	82	80	92	88	67	70	67	69	83	85	85	75	81	89	81	87	70	65	87	89	85	87	79	81	89	83
	Minimum	40	52	54	60	60	59	61	63	46	43	46	51	47	49	63	63	63	65	63	55	62	54	57	65	74	67	67	65	65	69	65
Trenton	Maximum	65	76	80	82	80	76	77	83	87	70	68	67	63	73	82	82	80	83	87	87	84	76	70	82	87	86	83	83	79	87	83
	Minimum	34	46	52	57	59	61	61	57	58	46	47	50	43	44	53	55	62	61	66	54	58	52	52	61	67	68	69	64	63	67	71

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charge
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
M.G.

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR MAY, 1918, AT THE UNIVERSITY
SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 37 and 38.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a.m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The
equipment is installed in accordance with Weather Bureau sta
described in Circular L. Horizontal distance of the anemome
pan, 2 inches. Height of cups of anemometer above rim o
inches. The instrument shelter is 100 feet southeast of the pa
of thermometers above ground, 11 feet. Distance of rain gage f
2.6 feet. The ground in the immediate vicinity of the pan slo
north, average 5 per cent grade. The soil is covered by blue g
being part of the University campus. There are no bodies of wa
nor are there any irrigation projects under way nearby. The
topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervisin
being George Reeder, Meteorologist and Section Director. The
tions in the table herewith, were taken by Orlin R.
observer, Weather Bureau. This is one of the "Class A" stat
signed to furnish practical information relative to evaporation.
complete climatic records have been made at Columbia, Mo.,
Weather Bureau for about 28 years. These records are publishe
are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for May, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.110	.189	.244	.258	.247	.156	.039	.247	.228	.296	.213	.043	.009	.048	.197	.233	.262	.087	.171	.137	.178	.292	.087	.047	.183	.283	.183	.158	.158	.0
Daily wind movement	63	29	39	36	39	35	34	35	32	102	47	50	22	18	28	29	35	32	34	42	42	34	36	36	34	44	25	26	25	1

*Total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian summer

OBSERVERS' REMARKS.

Brunswick—Large and heavy hail fell for ten minutes on the 29th. Strong wind from the southwest on the 9th.

Fayette—Fine growing month; the best rain in eight months fell on the 22d.

Kirksville—Fine month for farmers and nature lovers. Crop prospects fine.

St. Catherine—The most favorable month on corn I ever remember; corn planted the first days of the month is as big as it usually is by June 10th.

Warrenton—Good rains and good growing weather; end of month very warm.

Doniphan—Rains on the 10th, 11th, and 12th did thousands of dollars damage. At the end of the month rain is needed.

Amoret—Precipitation sufficient for all crops and fruits. Wheat and oats good to fair; hay a failure.

Appleton City—Rainfall about sufficient. Crop doing well; month has been warm.

Lamonte—Wheat is excellent; oats short and
meadows about 40 per cent of a full crop.

Warsaw—Month too dry for meadows and oats;
needed, except for wheat, which is fine.

Lockwood—Very favorable month for oats and wheat
poor stand and late; fruit fair and pastures good.

Eldon—The outlook for wheat was never better in
tion on large acreage. Some little damage from large
the 24th.

Avalon—Favorable for farmers. Everything in fine

Grant City—Excessive rains have improved all gras
rather too much for corn, much of which is getting gra
foul. Oats, wheat, rye, and potatoes good.

Kidder—Plenty of moisture for all crops. High wi
the 20th and 21st.

Lexington—Sufficient moisture, and grasses and grain
good growth.

Maryville—Hail on the 11th and 27th but did little d
Very high wind all day of the 9th.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

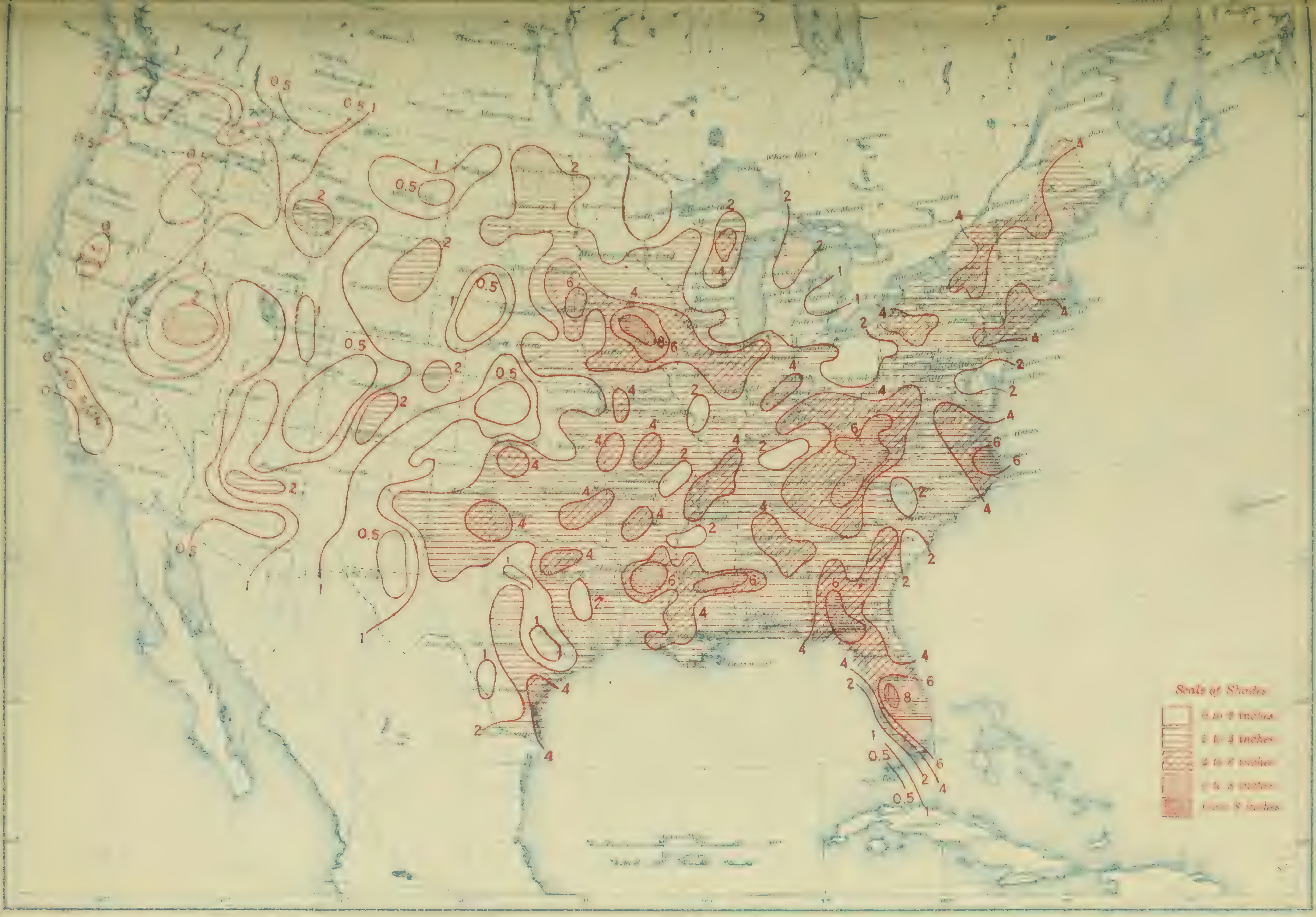
MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JUNE, 1918

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.
WEATHER BUREAU OFFICE
JULY 30 1918


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

XXII. COLUMBIA, MO., JUNE, 1918. No. 6.

GENERAL SUMMARY.

me, 1918, in Missouri, was characterized by a large nt of sunshine, uniformly high temperatures, and rather reity of rainfall. The rainfall, however, while generally ient, fell at quite regular intervals which was favorable if sufficient for all vegetation.

at matured into a fine crop, and the weather was favor- or harvesting. Oats were somewhat injured because of a of moisture. The corn crop was in good to excellent con- , but rain was needed in the central and southwestern ns Except in a few counties there was not sufficient rain astures, meadows, potatoes, and gardens.

streams were rather low.

TEMPERATURE.

monthly mean temperature for the State, determined the records of 67 stations, was 77.2°. The mean depart- rom the normal for 64 stations having 10 or more years' l was plus 3.9°. The warmth of the present month has equaled or exceeded in only four other Junes in the past ars, namely, in 1890, 1901, 1911, and 1914.

highest temperature this month was 110°. This has been d once and exceeded once since 1888. The lowest erature was 48°, which is not unusual for June. The west- f of the State was warmer than the eastern half because the drier of the two. Amoret experienced 18 days with rature 100° or higher; Appleton City 10 days, and other of the State 6 to 9 days, the average number of days for ate as a whole being 9.

PRECIPITATION.

average precipitation for the State, 85 stations reporting, .15 inches. The mean departure from the normal for 75 s having 10 or more years' record was minus 1.36 inches. recipitation was deficient in all divisions. It was less d, however, in the Ozark Plateau than elsewhere. Bates, n, Benton, and parts of Henry and Hickory counties, western plains, suffered more from drought than any other of the State. Pulaski, Laclede, Wright, and thence to ll County, Ozark Plateau, formed the wettest area. The st monthly rainfall was 8.06 inches, at Lockwood, and the 0.62 inch, was at Amoret. The greatest amount in any secutive hours was 4.28 inches, at Lockwood on the 6th.

average number of days with 0.01 inch or more itation was 7.

EVAPORATION.

total evaporation for the month, at Columbia, Mo., was 7.687 the total rainfall, 2.68 inches; the total wind movement over the of the pan, 917 miles, and mean temperature, 77°. During the onth in 1917, these data were, in order named, 6.262 inches; 2.66 920 miles, and 71°.

WIND.

prevailing direction of the wind was from the south. The average ovement was about 2 per cent less than normal. (Quite high wind il, occurred at Oakfield on the 20th; Warrenton on the 27th, and nville the 29th. Small tornadoes occurred in Sullivan and Adair s on the 24th, and in Pulaski on the 30th. (See last page.)

SUNSHINE AND CLOUDINESS.

verage number of hours of sunshine for the State was 341, or 4 per cent of the possible, and about 4 per cent above normal.

MISCELLANEOUS PHENOMENA.

--26th. Hail, local, on the 20th, 27th, and 29th. Halos, solar---4th, 5th, 6th 7th, 10th, 14th, 15th, 16th, and 29th. Thunderstorms---5th, 6th, 20th, 23d, 24th, 27th, 28th, 29th, and 30th. Tornadoes---24th, and 30th.

ERRATA FOR APRIL, 1918.

Caruthersville---Greatest 24-hour precipitation should be 1.24 inches on the 16th. Eldon---Monthly mean temperature, 49.6°. Lockwood---Partly cloudy days, 3; cloudy, 9.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour	Direction.	Date.
Columbia	29.92	78	......	336	75	4,908	6.8	30	w.	30
Hannibal	29.93	76	......	......	......	5,610	7.8	40	n.	10
Kansas City	29.90	67	41	361	81	7,783	10.8	35	n.	29
St Joseph	29.90	71	46	375	83	5,397	7.5	29	nw.	24
St. Louis	29.93	73	56	278	62	8,052	11.1	43	sw.	6
Springfield	29.94	77	60	334	76	6,263	8.7	32	w.	21
Cairo, Ill	29.92	75	60	......	......	5,211	7.3	27	se.	28
Keokuk, Iowa	29.94	78	61	300	67	5,166	7.2	30	nw.	2

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	72.6	−0.5	103	37	6.20	+1.26	......	0	7	....	....	....
1889	70.7	−2.4	100	38	1.66	−0.28	......	0	6	....	....	....
1890	77.2	+4.1	105	50	2.59	−2.35	......	0	6	....	....	....
1891	73.3	+0.2	103	46	6.94	+2.00	......	0	13	....	....	....
1892	74.5	+1.4	100	38	3.18	−1.76	1.25	0	7	15	9	6
1893	72.6	−0.5	98	42	4.61	−0.31	3.60	0	9	12	12	6
1894	74.5	+1.1	105	30	3.92	−1.02	3.48	0	7	16	11	3
1895	73.2	+0.1	100	42	5.77	+0.83	3.85	0	10	12	11	7
1896	72.5	−0.6	101	45	8.32	+3.38	5.60	0	9	12	11	7
1897	73.6	+0.5	102	38	6.18	+1.24	6.40	0	12	9	14	7
1898	75.3	+2.2	100	42	5.88	+0.94	8.15	0	9	13	12	5
1899	74.3	+1.2	104	42	3.87	−1.07	4.48	0	9	15	10	5
1900	73.3	+0.2	103	44	4.79	−0.15	5.06	0	10	12	12	6
1901	77.9	+4.8	110	40	2.13	−2.81	2.99	0	6	18	10	2
1902	70.9	−2.2	100	37	6.57	+1.63	6.08	0	12	11	10	9
1903	67.3	1.2	95	36	3.25	1.69	4.90	0	9	15	9	6
1904	70.5	2.6	93	45	6.42	+1.58	5.41	0	11	12	12	6
1905	75.2	+2.1	103	42	3.09	−1.85	4.80	0	7	15	10	5
1906	72.7	0.4	101	40	4.95	+0.01	4.07	0	10	15	9	6
1907	71.2	−1.9	97	40	5.84	+0.90	3.90	0	11	14	10	6
1908	72.3	−0.8	98	43	6.30	+1.36	5.30	0	11	13	10	7
1909	73.9	+0.8	98	49	5.21	+0.27	4.12	0	11	11	13	6
1910	70.4	−2.7	99	38	3.92	−1.02	3.70	0	8	16	7	7
1911	78.9	+5.8	112	43	1.78	−3.16	2.07	0	6	18	8	4
1912	69.5	−3.6	100	42	4.78	−0.16	5.60	0	9	14	8	8
1913	75.4	+2.6	107	33	2.57	−2.22	3.05	T.	6	18	8	4
1914	79.3	+6.2	106	43	2.37	−2.29	3.50	0	5	18	7	5
1915	70.8	−2.5	98	38	6.51	+1.87	4.86	0	12	11	10	9
1916	70.0	−3.2	100	42	6.99	+1.17	6.75	0	10	14	9	7
1917	71.0	−2.3	103	35	3.78	−0.59	4.19	0	8	19	7	4
1918	77.2	+3.9	110	48	3.15	−1.36	4.28	0	7	17	8	5

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	2.74	−0.84	1.00	0	4	27	1	2	.....	Wm. R. Bennett.
Boonville	41	2.74	−2.92	1.10	0	5	17	12	1	se.	C. Randecker.
C. Girardeau	11	2.85	−0.78	0.90	0	6	18	2	10	ne.	D. L. Albert.
Glencoe	1	1.93	....	0.74	0	5	19^{d}	3^{d}	4^{d}	......	L. M. Beard.
Hermann	44	3.67	−0.92	1.70	0	6	14	8	8	se.	E. J. Maushund.
New Madrid	24	4.89	+0.91	2.38	0	11	17	9	4	s.	Miss Josie Smith.
Osceola	18	1.96	−3.26	1.00	0	5	15^{d}	8^{d}	3^{d}	......	Wm. E. Mathews.
Pacific	1	1.93	....	0.74	0	7	14	4	12	e.	Mark Waters.
Steelville	16	3.65	−0.57	1.15	0	7	25	0	5	w.	F. Kreamelmeyer.
Tuscumbia	1	2.04	....	0.55	0	6	19	11	0	n.	C. B. Wright.
Union	1	3.42	....	0.80	0	9	13	5	12	sw.	J. Wm. Keller.
Valley Park	1	1.63	....	0.58	0	9	18	3	9	e.	H. J. Lucksinger.
Waverly	3	1.74	....	0.88	0	3	16	6	8	sw.	J. W. Cauthorn.

Climatological data for June, 1918.

Stations.	Counties.	Elevation, in feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With 0.01 or more precipitation.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Brunswick	Chariton	650	37	76.6	+3.8	102	17	[illegible]	[illegible]	[illegible]	3.06	−1.83	2.10	0	6	19	[illegible]	11	e.	[illegible]
Clifton Hill	Randolph	751		...	...	...	...	...					.....	..	...					[illegible]
Columbia	Boone	781	27	76.8	+2.3	101	17	56	22	35	2.68	−1.70	0.95	0	7	11	13	6	s.	U. S. Weather B
Fayette	Howard	725	32	77.6	+4.1	101	17	56	22	31	[illegible]	−1.31	1.13	0	6					Prof. T. P. [illegible]
Fulton	Callaway	818	13	77.6	+4.3	103	17	53	[illegible]	28	2.22	−2.10	0.85	0	5	21	6	[illegible]	sw.	Dr. O. M. [illegible]
Gorin	Scotland	700	28		.....	.....		...	..		1.48	−0.72	1.95	0	7	16	9	10	sw.	J. W. P[illegible]
Hannibal	Marion	534	24	74.8	+1.5	101	16	51	8	35	2.03	−1.40	0.77	0	9	13	12	[illegible]	sw.	U. S. Weather B
Jefferson City	Cole	557	31	77.4	+3.1	101	11†	55	[illegible]	[illegible]	2.13	−2.08	0.63	0	7	25	5	0	s.	[illegible]
Keytesville	Chariton	660	4		.	.		...			2.09	.....	1.21	0	4					[illegible]
Kirksville	Adair	969	25	71.6	+2.7	101	16	52	7†	36	2.54	−1.80	1.10	0	8	17	13	0	s.	Prof. [illegible]
Louisiana	Pike	469	39	74.5	+2.8	100	16	48	8	36	3.77	−0.27	1.68	0	8	19	8	3	s.	[illegible]
Macon	Macon	875	19	76.0	+3.6	105	16	53	22	35	2.57	−1.78	0.91	0	9	19	8	3	se.	Chas. N. [illegible]
Mexico‡‡	Audrain	797	39	75.7	+2.1	106	16	[illegible]	8	[illegible]	6.[illegible]	+1.[illegible]	3.55	0	4	20	0	10	e.	R. M. Llewelly[illegible]
Oakfield	Franklin	793	36	76.0	+2.0	104	17	56	22†	29	3.29	−1.33	1.39	0	8	9	18	3	s.	L. L. St[illegible]
Palmyra	Marion	652	5	74.8	+0.4	103	16	50	8	38	2.94	−1.75	0.91	0	6	17	7	6	se.	W. B. [illegible]
St. Catherine	Linn	850	4	75.4	.....	101	11†	53	22	31	2.88	.	1.04	0	6	17	13	0	sw.	L. D. Bar[illegible]
St. Charles	St. Charles	456	39	75.6	+1.6	101	16	55	7†	40	2.60	−1.76	1.23	0	7	14	10	6	s.	L. C. [illegible]
St. Louis (1)	St. Louis City	717	46	77.2	+2.1	100	16	58	[illegible]	21	1.47	−3.00	0.50	0	8	11	11	8	s.	U. S. Weather B
St. Louis (2)	do.	578	5	76.8	...	99	16	58	23	25	2.13	.	0.82	0	11	15	10	5	s.	St. Louis Univer
Shelbina	Shelby	779	25	.	.....			...	...		2.80	−2.29	1.40	0	6	...		...		S. G. Parsons.
Steffenville	Lewis	650	24	77.2^a	+4.4	106	16	50	8	40	2.75	−1.42	1.40	0	5	14^a	13^a	2^a	sw.	Frank H[illegible]
Unionville	Putnam	1,072	24	72.8	+0.8	100	16	48	22	[illegible]	3.15	−1.27	1.20	0	7	20	6	4	s.	Geo. W. Davis.
Warrenton	Warren	865	26	75.0	+1.6	102	16	55	22	33	1.25	−0.10	1.70	0	7	12	7	11	s.	Prof. J. H. Frie
Keokuk, Iowa	Lee, Ia.	574	46	74.7	+2.2	101	16	56	22	28	3.90	−0.45	2.61	0	11	17	11	2	ne.	U. S. Weather B
Section means and extremes				75.9	+2.6	106	16	48	8†	40	3.04	−1.31	3.55	0	7	16	9	5	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	83.7^c	+6.5	109	17	60	11	37	1.16	−0.28	2.05	0	5	22	5	0^c	e.	H. L. Averill.
Doniphan	Ripley	314	12	78.4	+3.7	102	17	54	23	37	1.92	−2.52	0.60	0	7	23	3	4	s.	W. W. Martin.
Jackson	Cape Girardeau	458	26	77.6	+3.5	103	17	53	13	41	3.05	−1.17	1.18	0	11	13	9	8	s.	L. M. Beas.
Marble Hill	Bollinger	420	25	75.8	+1.6	99	16	53	15†	47	3.50	−0.66	1.70	0	7	19	1	10	s.	Dr. A. L. Hendr
Patton (near)	Bollinger	500	2	.....	.....	.....	.....	.....			2.00	.....	0.75	0	5	...	.....	.....	.....	George F. Ellis.
Poplar Bluff	Butler	339	13	76.7	+0.8	102	17	53	23	36	3.15	−2.17	1.40	0	9	17	4	9	....	Miss Belle Kinne
Cairo, Ill.	Alexander, Ill.	359	44	77.4	+2.2	100	17	57	23	26	3.33	−0.98	1.97	0	10	7	13	10	n.	U. S. Weather Bu
Section means and extremes				78.3	+3.0	109	17	53	13†	47	3.02	−1.20	2.05	0	8	17	6	7	s.	
Ozark Plateau.																				
Arcadia	Iron	925	39	72.1	0.0	101	17	51	23†	36	3.38	−1.41	0.92	0	9	14	9	7	s.	Arcadia College.
Birchtree	Shannon	1,078	23	71.8^a	1.1	102	17	55	23	35	3.62	−0.91	1.20	0	9	22	6	2	sw.	V. H. Kirkenda
Bolivar	Polk	1,071	29	78.3	+5.5	103	18†	55	13	31	3.13	−2.16	1.20	0	7	14	11	5	sw.	K. H. Brown.
Cassville	Barry	1,500	6	.....	.....	.....	...	...	...	..	.....		.....	.....	.....	.....	.....	.....	.....	William Talbert.
Crocker ††	Pulaski	1,126	6	81.6†	+8.9	102	17	51	23	42	1.50	−1.22	2.25	0	3	23	0^c	4	ne.	Rev. W. Reed.
Dean	McDonald	1,000	18	77.0	+3.7	103	28	53	13	42	3.44	−2.53	1.05	0	7	21	2	1	.....	H. E. Dean.
Eldon	Miller	934	16	74.9	+1.3	102	17	52	22	35	2.59	−1.90	1.10	0	5	7	21	2	s.	E. H. Shepherd.
Fruit City	Reynolds	1,150	4	.....	.....	.....	.....	.....	...	...	...	..	.....	.....	.....	.....	.....	.....	.....	R. C. Walton.
Gano	Dent	1,250	13	76.1	+3.0	100	16^d	53	13†	37	3.32	−1.22	0.87	0	8	17	11	2	s.	A. C. Leach.
Goodland	Iron	1,000	12	73.8	−1.4	101	17	49	23	36	2.87	−1.10	0.60	0	7	17	12	1	s.	F. M. Adams.
Hollister	Taney	735	8	79.6	+3.8	104	18†	52	3	40	2.91	−1.03	1.15	0	5	18^a	0^a	11^a	se.	W. P. Chapman
Houston	Texas	1,280	24	75.9	+3.7	102	17	54	13	32	4.13	−0.70	0.82	0	10	18	7	5	se.	R. F. Harmon.
Koshkonong††	Oregon	958	16	78.1	+3.8	101	17	56	23	37	4.78	−0.53	1.91	0	8	17	10	3	ne.	R. M. Hitt.
Lebanon	Laclede	1,265	28	76.9	+3.5	102	18†	55	13	36	7.24	+2.11	2.49	0	8	19	7	4	s.	Leonard E. Dick
Lockwood	Dade	1,078	22	78.6	+4.3	100	18†	59	13	30	8.06	+3.17	4.28	0	3	19	9	2	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	18	75.1	+3.4	100	18	54	13	35	5.01	−0.61	1.27	0	9	12	7	11	sw.	Mo. Fruit Exp. S
Mount Vernon	Lawrence	1,480	38^c	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. L. White.
Neosho	Newton	1,011	34	78.2	+4.3	100	24	53	22	37	2.03	−3.45	0.51	0	8	24	3	3	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	76.9	+4.2	103	17	57	22†	33	2.94	−1.18	1.20	0	5	20	9	1	sw.	Prof. Elmo G. Ha
Springfield	Greene	1,350	29	77.0	+1.7	99	18	61	22	27	3.61	−1.58	1.26	0	10	20	8	2	s.	U. S. Weather Bu
Section means and extremes				76.6	+3.4	104	18†	49	23	42	4.13	−0.70	4.28	0	7	18	8	4	s.	
Southwest Plain.																				
Amoret	Bates	831	8	80.9	+7.6	110	20	54	8	46	0.62	−4.00	0.28	0	4	24	4	2	sw.	Darby Fruit Far
Appleton City	St. Clair	853	26	81.0	+6.3	105	18†	59	22	34	1.99	−3.35	1.64	0	6	19	10	1	se.	W. G. Bigelow.
Clinton	Henry	765	30	80.6	+7.5	105	11†	57	22	38	2.80	−2.09	1.72	0	5	16	13	1	sw.	A. E. Derwent, M
Harrisonville	Cass	912	44	78.8	+5.4	106	20	54	8	37	2.31	−2.36	0.88	0	6	4	11	15	sw.	A. J. Sharp.
Lamar	Barton	980	36	79.8	+5.4	104	19†	54	13	38	4.93	−0.16	2.50	0	6	12	13	5	s.	Joe W. Springer
Lamonte	Pettis	863	28	78.0	+3.3	105	20	52	13	40	4.64	+0.06	1.50	0	5	20	10	0	sw.	J. Ed. Hall.
Marshall	Saline	779	26	78.2	+5.3	104	20	51	8	36	3.28	−1.25	1.24	0	7	16	14	0	sw.	Dr. W. H. Black.
Nevada	Vernon	860	23	80.5	+7.1	103	18†	59	13	34	1.38	−3.96	0.50	0	6	15	11	4	s.	George A. Kaupp
Warrensburg	Johnson	883	38	80.6	+6.5	106	20	56	8	38	2.71	−2.10	1.70	0	5	16	13	1	sw.	Geo. H. Collins.
Warsaw	Benton	715	12	79.3	+5.6	105	20	50	13	43	2.27	−3.16	1.35	0	5	19	10	1	s.	J. R. Smith, M. D.
Section means and extremes				79.8	+6.0	110	20	50	13	46	2.69	−2.21	2.50	0	6	16	11	3	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	78.8	+5.7	104	17	55	7†	36	3.15	−1.11	1.95	0	6	25	4	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	77.2	+5.3	103	16	50	8	42	3.79	−0.45	1.60	0	7	15	10	5	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	77.6	+3.8	105	17	50	8	38	2.83	−3.08	1.20	0	7	18	5	7	sw.	Dr. J. R. Campbe
Conception	Nodaway	982	32	73.2	+6.1	103	17	52	7†	33	2.85	−1.60	0.94	0	7	19	10	1	se.	Fr. Adelhelm Hes
Gallatin	Daviess	803	17		.....	.....	.....	.	.....	...	3.68	−1.35	1.40	0	9	21	8	1	s.	Robert R. Wynne.
Grant City	Worth	1,154	21	76.0	+5.1	103	16	51	7	35	2.38	−2.00	0.88	0	8	23	6	1	nw.	W. H. Campbell.
Kansas City	Jackson	963	28	80.0	+7.0	103	20	58	7	26	1.50	−3.16	1.24	0	6	20	7	3	s.	U. S. Weather Bu
Kidder	Caldwell	1,020	26	77.6	+5.5	103	17	54	7†	30	4.35	−0.04	1.68	0	8	19	3	3	sw.	J. F. Sharp.
Lexington	Lafayette	688	35	78.5	+5.8	105	20	55	8	36	4.59	−0.31	2.10	0	6	16	0	14	s.	J. W. Keithley.
Liberty	Clay	864	28	80.0	+6.3	106	20	51	8	38	1.32	−3.59	1.27	0	4	20^a	8^a	1^a	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	74.7	+5.8	101	11†	49	22	37	2.25	−2.29	1.06	0	7	21	0	9	s.	J. R. Brink.
Oregon	Holt	1,048	61	76.8	+4.5	102	11†	51	7†	33	1.28	−3.46	0.72	0	4	19	7	4	ne.	Tom Curry.
St. Joseph	Buchanan	967	45	79.2	....	104	11	56	22	29	1.30	−3.38	1.05	0	7	17	11	2	sw.	U. S. Weather Bu
Tarkio	Atchison	976	5	77.4	+1.6	102	11†	50	22	36	2.68	−2.28	1.29	0	5	24	4	2	sw.	John F. Frazier.
Trenton	Grundy	822	22	76.4	+4.0	99	16	52	7	31	6.26	+2.27	2.36	0	7	21	8	1	n.	W. H. Estes.
Section means and extremes				77.7	+5.3	106	20	49	22	42	2.95	−1.74	2.36	0	7	20	6	4	sw.	
State means and extremes				77.2	+3.9	110	20	48	8†	47	3.15	−1.36	4.28	0	7	17	8	5	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete re used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, ^{b} represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: o Oakfield, Pacific No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for June, 1918.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
east Plain.																																	
e	Missouri						.18								T.							.73			1.10	T				.13	.60		2.74
k	Grand	.12					.27															.12			2.10	.63					.42		3.66
Hill	Chariton																																......
a**	Missouri					.10									T.	.17				T.	.65			T.	.80	T.			.01	.71	.24		2.68
	do					.76	.19															.56			1.13				.06		.65		3.35
	do					.03	T									.25						.39			.70						.85		2.22
	Meramec		.11				T.														.20	.74			.64				.24				1.93
	Mississippi					.94	.08								.08										1.95	.96			.12		.35		4.48
l **	do					T.					.33				.01	T.			T.	.05	.05				.77	.01		T.	.27	.19	.35		2.03
	Missouri							.30								T						.35			.21	.56			1.60	T.	.55		3.67
ity	do	.05					.03	.34														.30			.20	.58					.63		2.13
e	Chariton						.32															.08			1.21						.48		2.09
	Mississippi	.25				.15									.14					T.	.08				1.10	.02			.10	T.	.70		2.54
a	do						.20								T.	.03				.37	.18				.76	.14			.41		1.68		3.77
	Chariton	.33				.12	.33								T.				.03		.08				.94	.06				.53	.55		2.97
	Mississippi																				T				.80	.35			3.55		1.30		6.00
	Meramec	T.	.06				.10													T.	.06	.53			.68	T.		1.39	.11		.27		3.20
	do		.05	T				.04														.15				.70			.74	.04	.21		1.93
	Mississippi																				.42	.02			.71	.55				.33	.91		2.94
rine	Grand														.07			.15							.94	T.			.60	.08	1.04		2.88
	Missouri		.09				.48				T.					.08				T.	1.23	.10			.48	T.					.14		2.60
n **	Mississippi	T.	.10				.44									.02				T	.50	T.			.32	.02		.01	T		.06		1.47
(2)	do	.01	.11				.72									.03				.01	.82				.29	.03		.01	.01		.09		2.13
	do				.15										.22						.23				1.40				.20		.60		2.80
lie	do					T.													.40	.05					1.40				.50		.40		2.75
	Meramec		.10					.80		.01												.41			.40	.53			.63	.16	.38		3.42
	Grand	.16					.03				T.				T.	.50	T.				T.	T.			.40	.60				.26	1.20		3.15
ark	Meramec		.20					.01								T.	T.			T.	.01	.49			T.	.59	.02		.02	.15	.15		1.63
	Mississippi							.51								T.				T		.23			.21	.40			1.70	.60	.55		4.25
Iowa**	do				.54						.10				.01				.10	.34	.01				2.61	T.		.02	.08	.02	.07		3.90
st Lowlands.																																	
rdeau	Mississippi		.20					.30														.90				.35				.60	.50		2.85
sville	do	T.	.70			T.	.56	.70		T.										T.		T.			T.	.15				2.05	T.		4.16
o	Black	.15	.10			T	.50		T													.15			.17	.25					.60		1.92
	Mississippi	.24	.07			.01	.15														.02	1.18				.20	.06	.11	.75		.26		3.05
ill.	do	.10	.10						.20													.60					.30		1.70		.50		3.50
nd	do		.62	.02			.43	2.38				.30								.01		.32	.01			.13				.64	.03		4.89
ar)	do																				.50				.40	.25			.75		.10		2.00
nd	Black	T.	.27	.18			.01	.12						T.							T.	.03	.18			.11				.52	1.40		3.15
**	Mississippi	.42	.08			1.69	.28			.01					T.						T	.65			.07	.03			.02		.08		3.33
Plateau.																																	
	Gasconade		.92	.43			.09	.07			.47											.35				.55				.29	.21		3.38
	Black							T														.69				1.00				.25	.80		2.74
	Osage	.23	.15			.35		.12														.45			.24	.23				.65	1.20		3.62
	White				T.	.32	.17															.43				.92			.07	.02	1.20		3.13
	Gasconade																													.60	.41		......
	Neosho																		T.			2.25			1.00						1.25		4.50
	Osage	.10			T.	.11	.05	T	.73				.11																	1.05	.99		3.14
	Black					1.10													.06		.03	.31			1.06								2.59
	Meramec																																......
	Black	.20	.15			.05	T.															.83			.47	.40			.85		.37		3.32
	White		.57			.60	.05															.42			.55	.25					.43		2.87
	Gasconade	1.15					.16							.45															.52	.63			2.91
	Mississippi	.28	.12			T	.27												.42			.82			.72	.27	.21	.22		.80			4.13
ong	Black	.11				.62	.15															.26			.54	.45				1.91	.74		4.78
	Osage	T.					.67	.46	T.													1.40	.08		2.49	.71				.40	1.03		7.24
l	do					T	4.28						T.													1.99		T.	T.	1.79			8.01
Grove	White	.33	.08				.52				T.		T.							.09		1.26	.32			1.02				.12	1.27		5.01
m	Neosho																																......
	do	T.			T.	T.	.30	.51	.24				.05												T.	.01		.16	.14	.62			2.03
	Meramec			.12			.10	T														.80				1.20				T.	.72		2.94
l**	White	.09	T.			.40	.11	T.	.02				T.									.02		T.	.87	.39			.87	.34	.50		3.61
	Meramec		.10				.10				.09											.95				.71				1.15	.55		3.65
ia	Osage						.02								T.					.07		.55			.54	.36					.50		2.04
st Plain.																																	
	Osage						.16																	.28	.03						.15		0.62
City	do	.05					.06											T.		T		.03		.19	.02						1.64		1.99
	do	.12																						.15	.45					.36	1.72		2.80
ville	do	.18					.31	.88														.03			.23						.68		2.31
	Neosho						2.50	.10																T.	.80			.03		.50	1.00		4.93
	Missouri					1.10									T						.53	.26			1.50	T.				1.25			4.64
	do	.16				.78	.23								.05				T.		T.	.12		T.	1.21	T.				T.	.70		3.28
	Osage			.02		.41																T.		.22	.10				.10		.50		1.38
	do						.07															.55			.08	.26					1.00		1.96
burg	Missouri	.46				.23	.02															.20									1.70		2.71
	Osage					.22	T	T.					T.									.26		.04	.40						1.35		2.27
	Missouri	T.					.12								T.						T			T.	.74						.88		1.74
st Plateau.																																	
	Grand																				.10			1.45	.50				.10	.15	.85		3.15
	do		T.			.25	.50								.35					T				T.	.65			T.	.40	.04	1.60		3.79
	do	.20									.05				.10	.08									1.15					.05	1.20		2.83
on	Missouri		.06				.84								.21									T.	.23			T.	.20	.37	.94		2.85
	Grand					.10	.01								.22					.03	.01			T.	.93	T.			.72	.26	1.40		3.68
r	do	.05					.88								.39					T.					.43	.05	T.	.23	.20		.15		2.38
ty***	Missouri						.01								T	T					.07	.01		T.	.17					1.12	.12		1.50
	Grand					.01	.06								.02	.20						.10			1.68					.65	1.63		4.35
	Missouri	.35				.02	1.83															.12		T.	.17						2.10		4.59
	do																					.02			.03					.25	1.02		1.32
	do		.07				1.06								.09	.11									.06				T.	.39	.47		2.25
***	do						.11								.02						T.			T.					.43	.72			1.28
	do	T.													.05	T.					.14			.02			T.		.01	1.00	.05		1.30
	do		.15				1.29								.17														.28	.79			2.68
	Grand		.18			2.36					.30				.21						T			T.	1.04				.49	1.65			6.26

ept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the bservation. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch
lar Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. † Separate
fall not recorded.

Daily temperatures for June, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Plain.																															
Brunswick §§	Maximum	82	82	87	87	81	81	77	81	[illegible]	96	101	[illegible]	91	88	100	101	102	95	87	101	86	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	63	60	63	67	67	67	[illegible]	[illegible]	56	69	69	64	69	64	70	75	73	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	82	83	87	88	87	[illegible]	76	[illegible]	86	92	100	86	[illegible]	85	96	100	101	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	68	62	61	65	69	67	61	58	63	66	[illegible]	66	[illegible]	69	71	75	73	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	81	83	87	88	[illegible]	81	77	81	87	93	99	[illegible]	[illegible]	88	[illegible]	101	104	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	66	62	63	67	66	67	61	57	63	67	68	[illegible]	[illegible]	70	74	74	77	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	81	81	86	87	86	[illegible]	76	81	87	93	100	87	[illegible]	89	96	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	69	63	61	68	67	67	60	51	62	68	[illegible]	66	61	69	68	74	74	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	[illegible]	85	88	88	87	[illegible]	77	81	87	93	101	86	[illegible]	87	98	101	101	96	87	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	71	62	62	61	67	68	62	60	62	65	68	[illegible]	[illegible]	[illegible]	[illegible]	73	75	73	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	81	79	86	87	87	82	76	81	87	93	99	[illegible]	92	[illegible]	[illegible]	101	95	87	81	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	61	56	59	61	61	65	52	52	61	68	65	68	[illegible]	64	67	72	71	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	87	83	86	86	81	83	83	83	86	90	[illegible]	95	[illegible]	90	[illegible]	100	[illegible]	91	81	86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	62	55	62	60	61	60	48	58	62	62	65	[illegible]	[illegible]	68	74	61	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	81	81	88	90	88	87	79	87	89	97	103	[illegible]	89	89	99	103	101	89	83	[illegible]	96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	62	63	63	63	65	65	56	51	57	65	67	62	[illegible]	59	69	72	73	66	62	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	83	81	88	89	90	86	77	83	88	[illegible]	100	86	88	[illegible]	97	106	101	92	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	67	61	58	59	62	67	59	53	57	66	64	62	57	61	63	73	77	66	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	82	83	85	88	[illegible]	85	77	79	88	93	97	87	81	[illegible]	[illegible]	100	101	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	66	63	65	61	66	61	57	59	69	70	65	55	64	69	72	77	68	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	80	80	[illegible]	87	87	85	74	[illegible]	[illegible]	[illegible]	101	87	88	[illegible]	95	101	100	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	61	57	62	66	63	65	51	51	60	67	67	61	57	66	72	74	71	66	63	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	80	83	86	87	88	81	78	[illegible]	87	87	97	[illegible]	83	89	90	100	98	88	78	76	86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	68	69	71	73	69	65	59	61	73	73	68	63	69	74	76	79	71	[illegible]	62	[illegible]	59	58	64	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum	82	80	86	88	86	80	75	82	86	94	98	86	90	88	97	100	91	81	82	94	[illegible]	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	51	55	60	60	61	50	49	52	65	64	[illegible]	[illegible]	56	65	67	70	61	60	58	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	80	82	88	89	87	81	78	81	85	94	101	81	86	88	85	102	101	90	80	81	86	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	70	64	63	62	65	67	60	56	59	58	68	64	[illegible]	61	68	71	75	66	64	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																															
Caruthersville	Maximum	....		..	99	92	90	90	90	94	94	100	98	93	97	104	107	109	102	99	102	98	102	94	90	[illegible]	[illegible]	[illegible]	97	[illegible]	[illegible]
	Minimum	...		...	70	70	68	68	67	70	68	72	77	64	69	68	70	74	80	70	69	74	[illegible]	61	63	74	71	73	73	[illegible]	[illegible]
Doniphan	Maximum	82	85	87	89	90	89	89	79	89	93	99	92	85	93	96	100	102	95	89	96	93	83	82	81	96	[illegible]	87	94	95	[illegible]
	Minimum	72	67	62	63	61	63	70	65	64	65	68	73	59	55	65	63	63	76	67	63	72	64	54	63	68	71	[illegible]	72	[illegible]	[illegible]
Jackson	Maximum	87	85	88	91	92	90	82	81	90	91	101	96	88	93	100	102	103	100	88	85	89	86	87	79	86	94	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	72	66	59	59	65	67	67	60	63	68	61	72	53	69	60	61	69	71	64	58	[illegible]	61	[illegible]	55	73	64	70	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	82	82	90	93	80	96	82	81	87	94	90	95	95	90	95	99	90	98	95	99	90	96	[illegible]	95	90	90	98	90	[illegible]	[illegible]
	Minimum	66	60	59	60	61	66	67	60	60	65	55	60	60	55	53	61	70	68	75	62	53	57	55	74	56	53	51	[illegible]	60	67
Poplar Bluff §§	Maximum	81	81	89	88	88	88	83	79	87	89	98	90	84	91	91	99	102	95	90	92	91	81	81	82	94	92	95	92	85	[illegible]
	Minimum	69	66	65	63	62	66	69	63	63	62	62	69	62	58	58	63	66	71	69	66	66	62	53	59	62	68	68	65	67	67
Ozark Plateau.																															
Arcadia §§	Maximum	76	84	83	85	85	86	75	75	85	91	96	86	83	87	92	98	101	90	82	85	88	79	80	78	85	94	94	88	90	77
	Minimum	70	65	58	57	58	61	65	58	59	63	67	58	56	56	61	61	65	70	64	61	65	60	51	51	60	62	[illegible]	66	64	69
Birchtree	Maximum	82	84	85	88	85	86	80	75	85	90	96	93	85	91	96	100	102	97	90	94	89	..	84	79	89	93	[illegible]	[illegible]	86	[illegible]
	Minimum	65	65	62	62	63	67	65	62	61	65	65	76	59	58	63	65	72	74	68	62	68	...	55	59	69	66	67	70	65	65
Cassville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	96	99	92	97	99	94	87	97	99	97	96	101	101	93	79
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	80	65	65	64	64	71	56	65	71	74	77	66	68	63	[illegible]
Eldon	Maximum	80	85	88	89	86	83	83	81	87	92	100	85	86	87	89	100	102	100	94	93	88	71	75	79	81	80	92	93	81	82
	Minimum	67	60	57	63	63	60	60	57	60	65	65	54	59	57	60	69	74	70	65	63	67	52	56	61	70	68	67	70	63	[illegible]
Fruit City	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gano	Maximum	78	83	87	87	88	85	75	82	88	92	98	87	90	90	99	100	100	94	85	96	86	78	84	83	82	92	95	[illegible]	89	87
	Minimum	64	65	67	57	60	65	62	58	68	65	68	68	53	61	64	68	75	70	64	63	66	57	53	57	70	64	60	63	64	64
Hollister	Maximum	80	84	87	91	87	86	88	85	84	86	97	90	97	95	94	95	102	104	102	104	99	92	95	96	102	98	105	98	101	91
	Minimum	58	57	52	56	57	56	54	53	61	56	68	66	65	68	70	71	68	64	76	78	76	77	76	68	70	70	68	65	67	[illegible]
Koshkonong	Maximum	82	85	83	89	88	86	81	83	85	92	95	90	86	88	97	99	101	98	97	99	88	85	85	83	93	93	96	95	87	85
	Minimum	68	65	60	63	67	67	66	62	64	67	70	73	60	61	60	69	76	80	80	65	69	63	56	61	70	67	70	70	63	66
Lebanon §§	Maximum	85	85	88	89	85	85	77	84	85	91	98	87	89	89	96	99	101	102	92	102	96	80	79	89	85	93	95	95	89	78
	Minimum	64	62	59	63	64	64	63	60	62	62	62	68	55	55	63	67	72	73	69	69	68	68	58	63	64	64	64	70	66	64
Mountain Grove §§	Maximum	71	82	84	87	87	84	76	73	85	91	96	86	85	90	95	98	98	100	89	98	86	78	78	83	87	91	91	92	85	76
	Minimum	65	64	61	63	65	66	63	63	62	64	66	68	54	58	60	66	71	70	68	66	66	59	58	56	59	61	64	69	65	65
Neosho	Maximum	82	85	89	88	85	87	83	78	86	90	94	94	88	90	94	95	97	99	99	98	98	90	86	100	99	99	98	98	92	[illegible]
	Minimum	64	61	57	59	64	66	66	63	62	64	66	65	54	60	67	64	65	64	66	68	74	53	65	73	77	64	72	70	68	64
Rolla §§	Maximum	76	87	89	89	85	86	82	84	89	94	100	89	80	88	90	101	103	98	87	95	88	81	84	86	85	93	96	95	92	75
	Minimum	70	65	60	60	61	65	63	61	62	66	68	67	59	59	67	68	74	72	67	66	68	57	57	68	60	67	68	72	65	65
Springfield	Maximum	74	81	83	84	80	83	73	73	85	88	95	85	84	88	92	94	97	99	91	97	86	80	79	96	86	91	96	93	86	73
	Minimum	65	66	65	67	66	64	65	64	64	68	72	68	64	65	70	73	74	73	72	72	70	61	64	69	67	67	73	67	66	64
Southwest Plain.																															
Amoret	Maximum	86	88	92	92	91	89	87	85	91	100	108	102	96	100	100	103	107	106	105	110	103	103	82	105	102	103	102	102	101	93
	Minimum	56	52	59	61	55	65	60	54	62	64	69	66	57	65	66	71	72	69	68	72	73	57	65	65	66	60	71	71	70	60
Appleton City	Maximum	81	87	89	90	88	88	78	82	89	97	104	93	91	93	99	101	104	105	101	105	100	85	82	103	93	99	102	100	98	91
	Minimum	65	62	63	66	69	68	63	61	68	68	71	69	62	65	71	71	71	74	71	72	73	59	66	69	75	68	73	74	71	64
Clinton	Maximum	85	89	91	92	90	90	82	86	91	100	105	92	94	94	100	103	104	105	99	105	96	86	84	104	94	99	102	99	97	81
	Minimum	63	66	65	63	68	65	62	60	65	66	68	67	67	64	70	72	69	73	76	68	72	57	65	66	66	65	[illegible]	73	70	62
Harrisonville §§	Maximum	85	87	90	90	89	83	75	85	92	96	101	88	93	95	102	103	104	103	101	106	92	91	81	101	92	98	104	97	95	78
	Minimum	57	58	61	63	65	65	60	54	64	64	64	66	57	59	68	73	70	70	70	70	71	57	57	66	70	65	68	69	68	62
Lamar §§	Maximum	81	89	90	91	89	87	79	79	87	94	102	89	89	93	99	99	103	104	102	94	85	85	104	94	104	95	101	100	94	80
	Minimum	66	61	61	62	67	66	66	64	63	67	69	72	54	63	68	67	70	69	72	71	59	67	72	72	66	77	71	72	64	65
Lamonte	Maximum	82	72	88	88	86	85	76	82	88	96	101	87	92	94	100	102	103	102	92	105	89	80	85	97	88	96	100	97	95	90
	Minimum	61	60	60	64	69	67	59	60	63	66	64	60	52	69	73	74	71	70	70	71	67	55	61	64	70	65	67	65	60	60
Marshall	Maximum	82	85	87	88	87	85	81	84	88	96	102	98	90	88	100	102	102	101	97	101	90	84	89	96	92	95	97	94	94	76
	Minimum	58	60	58	62	66	65	59	51	66	65	66	64	57	66	71	71	70	69	68	69	68	54	60	70	72	66	68	68	66	61
Warrensburg	Maximum	86	84	93	93	88	86	78	89	90	98	103	91	97	96	105	105	105	103	97	106	92	82	80	101	91	99	102	102	98	80
	Minimum	67	65	60	65	68	64	59	56	66	68	74	65	59	69	72	74	74	71	69	74	72	57	63	64	71	68	72	76	72	62
Warsaw	Maximum	83	87	90	91	87	90	82	84	91	97	101	90	93	94	101	104	104	103	95	105	94	85	82	102	89	97	101	99	95	85
	Minimum	65	57	54	60	67	67	63	60	62	63	68	66	50	61	66	65	69	76	70	70	72	58	60	66	72	66	68	78	68	65
Northwest Plateau.																															
Chillicothe §§	Maximum	85	82	89	89	87	85	77	84	90	99	103	98	92	90	101	103	105	98	90	103	90	83	87	97	90	95	100	85	82	78
	Minimum	70	57	62	64	65	65	54	50	60	67	65	68	55	65	66	73	71	69	65	67	67	52	61	65	70	66	69	66	65	59
Grant City	Maximum	84	82	88	91	89	82	73	83	90	96	103	83	92	90	101	103	101	89	87	91	85	77	82	95	90	93	90	81	77	76
	Minimum	58	58	62	66	64	63	51	51	61	66	68	62	62	66	70	73	70	68	63	69	73	62	63	63	69	70	66	62	62	57
Kansas City	Maximum	84	84	88	87	87	84	72	83	87	98	101	86	89	95	100	100	100	100	96	103	87	79	79	96	89	95	98	91	88	75
	Minimum	65	62	69	71	71	67	58	59	67	73	78	69	67	73	78	79	78	75	72	77	70	58	68	71	72	72	76	70	65	66
Kidder §§	Maximum	83	81	87	86	85	85	75	85	88	96	101	85	91	91	101	101	103	101	91	100	86	82	87	94	100	90	100	81	78	74
	Minimum	60	59	62	67	65	66	51	55	62	69	71	61	61	71	73	76	73	68	68	75	68	54	62	68	70	70	70	66	70	58
Lexington §§	Maximum	83	84	89	90	84	85	76	85	89	97	102	86	92	92	100	102	103	101	93	105	88	82	86	101	90	98	100	92	94	76
	Minimum	61	60	61	61	67	66	60	55	65	66	71	66	61	73	75	77	75	70	70	72	70	57	62	65	70	68	70	68	68	63
Maryville §§	Maximum	82	80	86	88	88	77	73	83	88	96	101	86	92	93	101	101	101	97	86	93	85	80	85	96	92	94	101	80	60	77
	Minimum	55	55	62	64	64	61	50	51	54	64	67	60	61	64	65	65	70	69	66	66	66	49	52	66	66	67	64	62	59	55
Oregon	Maximum	75	73	80	87	87	83	75	80	90	95	102	86	92	97	101	102	102	102	94	100	88	81	84	98	94	95	102	84	78	78
	Minimum	57	57	63	64	65	64	51	52	61	66	71	61	62	66	74	74	70	70	67	75	66	51	64	67	67	69	69	62	59	56
St Joseph	Maximum	85	83	89	88	89	83	75	84	90	99	101	88	92	96	101	101	102	102	95	99	88	82	83	97	93	95	100	84	75	76
	Minimum	63	61	66	68	70	66	56	56	66	71	75	65	67	69	79	79	78	73	70	75	68	56	67	70	70	72	72	68	62	59
Trenton	Maximum	84	80	83	87	89	80	76	81	85	90	98	96	89	88	97	99	97	94	88	92	82	84	85	89	87	88	97	90	81	75
	Minimum	61	59	63	65	65	66	52	55	63	67	70	62	62	68	71	75	74	69	65	69	68	55	60	67	70	68	70	66	65	59

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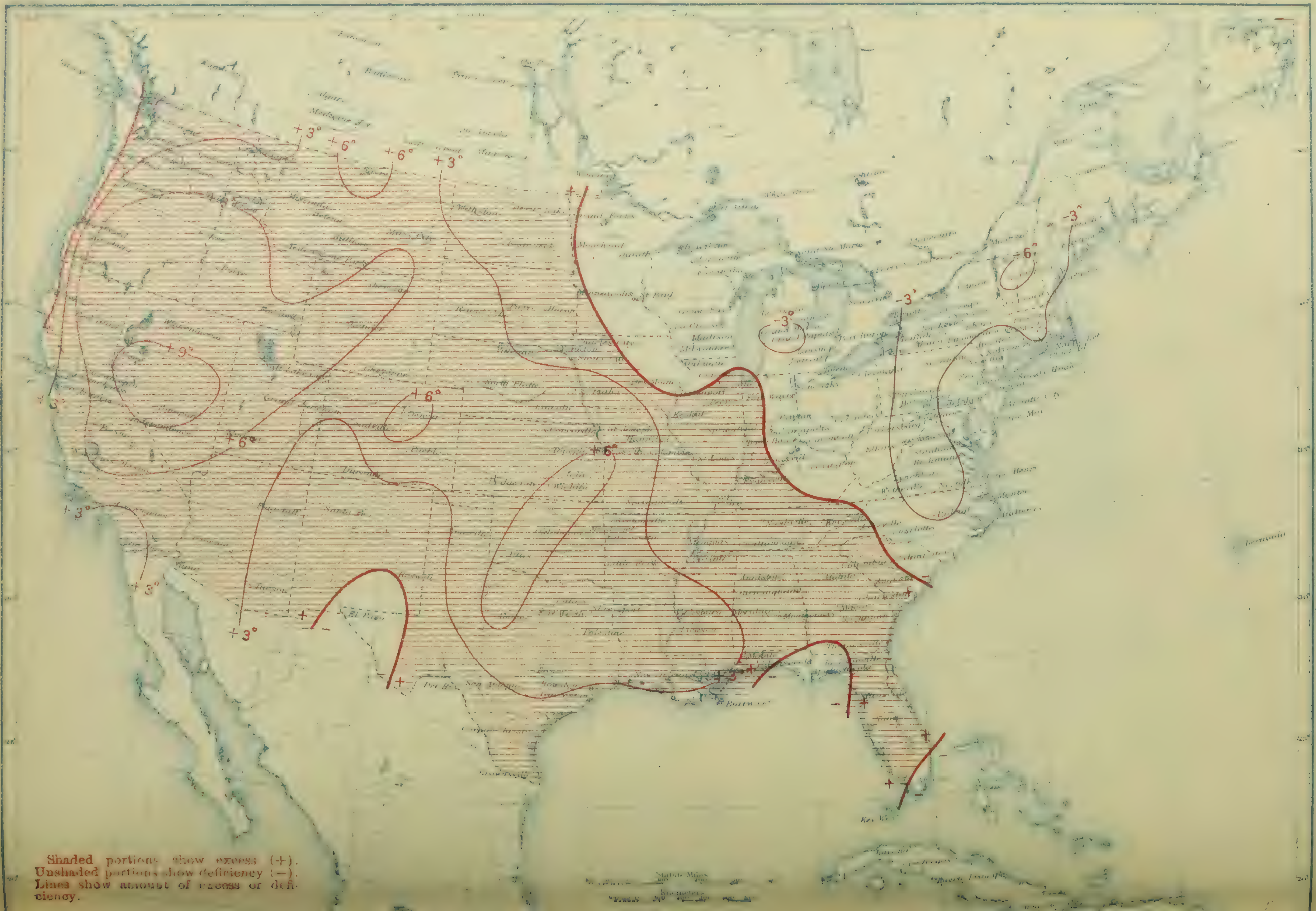
^{1}, ^{2}, ^{3}, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is cha
he preceding day, on which it almost always occurs.

Departure of the Mean Temperature from the Normal, June, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR JUNE, 1918, AT THE UNIVERSITY O
SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 45 and 46.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a. m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B. W. G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau sta described in Circular L. Horizontal distance of the anemometer pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 100 feet southeast of the pan of thermometers above ground, 11 feet. Distance of rain gage fr 2.6 feet. The ground in the immediate vicinity of the pan slop north, average 5 per cent grade. The soil is covered by bare g being part of the University campus. There are no bodies of wa nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by Orlin R. observer, Weather Bureau. This is one of the "Class A" stati signed to furnish practical information relative to evaporation. complete climatic records have been made at Columbia, Mo., Weather Bureau for about 28 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for June, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Daily evaporation	.307	.356	.241	.272	.257	.152	.212	.258	.171	.202	.268	.381	.308	.280	.134	.223	.342	.124	.340	.218	.163	.322	.228	.274	.159	.158	.264	.301	.257	.21
Daily wind movement	48	19	20	21	19	19	40	36	19	20	20	34	39	28	25	21	26	48	36	38	27	48	27	21	57	27	20	39	39	

*Total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian summer

OBSERVERS' REMARKS.

Fayette—Fine weather for harvesting, corn, and most growing crops.

Kirksville—A tornado occurred about six miles north on the 24th. Destroyed buildings. At Green City, Sullivan County, seven lives were lost, and $30,000 damage done.

Oakfield—There was a violent thunderstorm the night of the 20th.

St. Catherine—The first half of June was dry; and sufficient rain did not fall until the last week; drops doing well.

Warrenton—Wind and hail on the 27th damaged crops, telegraph and telephone lines, and trees.

Crocker—A small tornado occurred one half mile south on the 30th. Outbuildings were damaged and trees uprooted.

Lockwood—Hot winds damaged oats and late wheat. Corn is good.

Amoret—The weather has been dry and unfavorable for all crops.

Appleton City—The last part of June was hot and dry. A hailstorm occurred night of the 29. The stones were large.

Clinton—This has been the hottest June for six year

Harrisonville—Two men and several head of sto killed by lightning on the 29th.

Lamonte—Corn looks fine. Crops medium. F gardens fair.

Nevada—Very hot and dry for June.

Warrensburg—The month has been hot and dry.

Warsaw—Hot and dry. Damage to meadows, garde and oats. Wheat fine; corn good.

Avalon—Hot and dry. Very favorable last part of Corn good.

Grant City—Wheat, oats, and rye good. Hay sho tatoes fair.

Kidder—Month unusually warm.

There was local hail in Gentry and Audrain countie 27th, causing some damage to crops. On the 29th, seve fell in southern Boone County; the path of destruction about two miles wide and about six miles long, in more southwest toward northeast direction.

DAMAGING STORMS.

TORNADOES---A tornado devastated a fertile portion of Sullivan County on June 24th, between 6 and 7 p. m. It formed about 6 p. m., to the east of Boynton, where several fine barns were demolished, and passed rapidly eastward to the section north of Green City, steadily increasing in intensity as it progressed. In the six-mile track adjacent to Green City, destruction was practically complete over a strip from one-fourth to one-half mile in width. Seven persons were killed and ten others injured. The loss of buildings and live stock sustained is estimated at $30,000 to $35,000. In many instances occupants of the destroyed homes had time to seek refuge in storm caves or the toll of human life would have been greater. The storm lifted at a point almost due north of Green Castle and did no further damage.

A second tornado developed about 6 p. m. of the same day on the east side of the Chariton River across from Connelsville, Adair County. It moved to the northeast, crossing the Wabash Railway two miles south of Sublett, and traveled two or three miles farther to the east. In this distance of ten miles the storm dipped to earth several times, ea of devastation being less than a mile in length. Six well improv were swept of crops and improvements of a substantial characte clusive of grain and hay blown away, the estimated damage is p $7,000. There were no persons injured.

On the afternoon of the 30th, exact time unknown, a small struck the section just south of Crocker, Pulaski County. ber was uprooted and several small buildings demolished. The was about $900.

HAIL---Night of 29th at Appleton City a fall of large hailst considerable damage to crops over a limited area. At Warrento 27th, telephone and telegraph wires, trees, growing crops, an grain were damaged by a local wind and hail storm. No esti the damage are available as yet.

LIGHTINING---Two men and several head of stock were kill Harrisonville on the 29th.

O. R.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

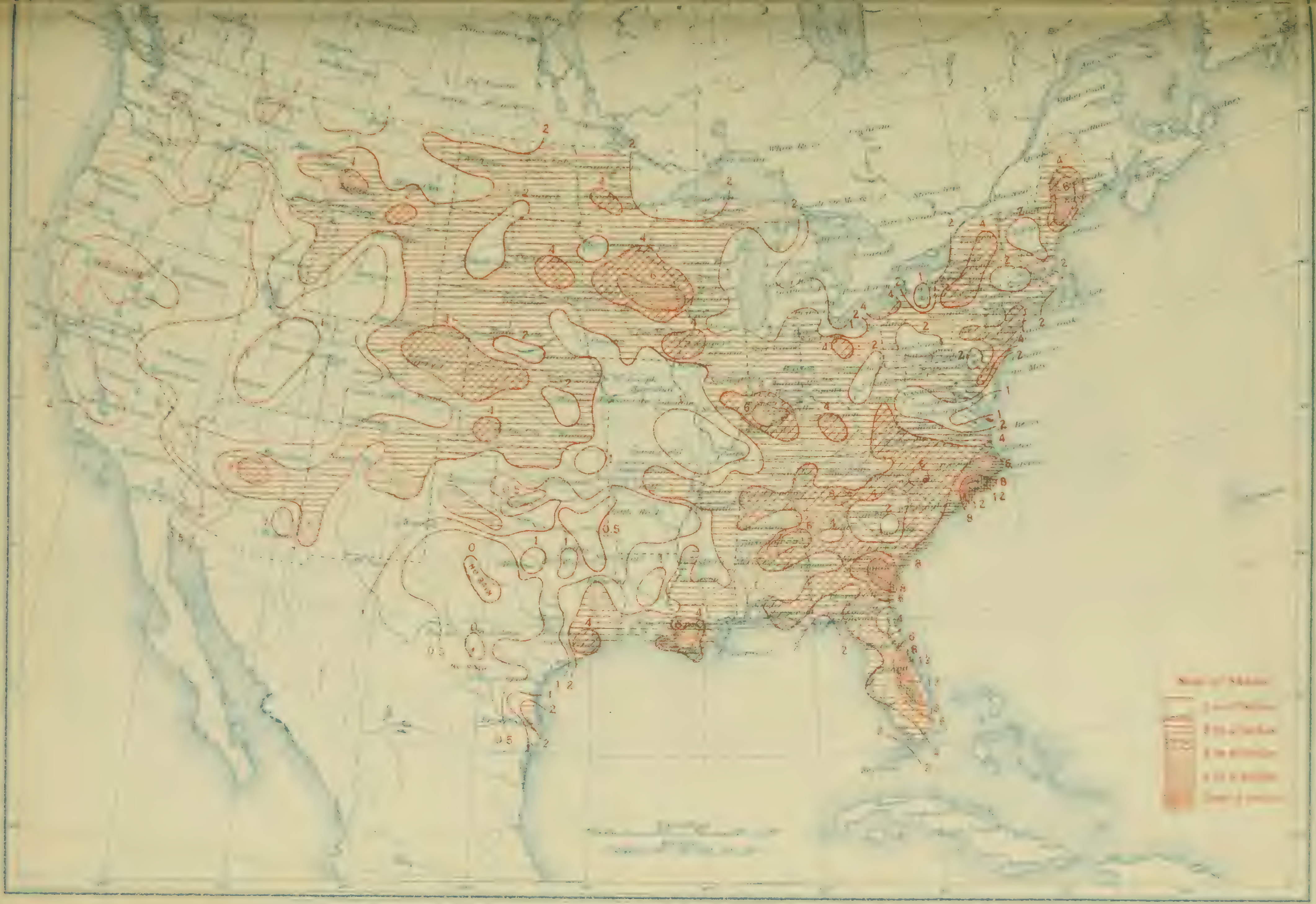
MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

JULY, 1918

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
AUGUST 27, 1918.


NO RAIN
0
0.5
1
2
4
6
8
12

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

OL. XXII. COLUMBIA, MO., JULY, 1918. No. 7.

GENERAL SUMMARY.

July, 1918, in Missouri, was a month of nearly normal emperature and sunshine. The lack of rainfall and low state f moisture in the air were the unusual features. The month made the fourth July of severe drought since 1867. A drought with normal sunshine and subnormal temperature (the temperature condition during the first three weeks was slightly below normal) is rather a rare combination in Missouri.

By the close of the month the drought was serious in all parts of the State. The yield of oats was markedly lowered; pastures were failing fast, as well as gardens, truck, and most minor crops; corn was caught in its critical stage of silk and tassel and was needing heavy rains at once to prevent serious impairment.

TEMPERATURE.

The monthly mean temperature for the State, 68 stations reporting, was 77.1°. The mean departure from the normal for 52 stations having 10 or more years' record was plus 0.2°. The warmth was uniformly distributed, although the Ozark Plateau was slightly cooler than the other divisions. Except from about the 20th to the 26th, which was the warmest period of the month, the weather was pleasant. During the last 10 days maximum temperatures ranged above 90°, and reached 100° or higher at several stations on three or four days; this, however, is not uncommon in Missouri in July.

PRECIPITATION.

The average precipitation for the State, 88 stations reporting, was 1.76 inches. The mean departure from the normal was minus 2.49 inches. The precipitation was deficient at all except three widely separated stations. The southeastern lowlands received but 15 per cent of normal precipitation, being the driest section; the northwestern plateau, with 49 per cent of normal precipitation, was wettest. The State as a whole received but 41 per cent of its normal July precipitation. Only three other Julys since 1867 were as dry or drier than the present month, namely, in 1881, 1886, and 1916.

The average number of days with 0.01 inch or more precipitation was 6.

EVAPORATION.

The total evaporation, at Columbia, Mo , was 7.637 inches; otal precipitation, 0.73 inch; total wind movement over the urface of the pan, 863 miles, and the mean temperature, 77°. During the same month in 1917, these data were, in order named, 7.18 inches; 0.93 inch; 830 miles, and 78°.

WIND.

The prevailing winds were from the south. Average movement, based upon the records of eight stations equipped with nemometers, was 5,529 miles, or about 7.5 miles per hour and bout 4 per cent above normal. There were no damaging winds.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine for the State was 337, or 74 per cent of the possible and about 3 per cent above he normal.

MISCELLANEOUS PHENOMENA.

Hail—Locally in the central and south portions of Worth ounty on the 28th.

Halos, solar—3d, 4th, 13th, 14th, 16th, and 17th.

Thunderstorms—Local on the 15th, 16th, 21st, 25th, 26th, and 29th, and more or less general on the 22d, 23d, and 24th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity: 7 a. m.	Mean relative humidity: 7 p. m.	Sunshine: Total hours.	Sunshine: Percentage of possible	Wind: Total movement, miles	Wind: Average hourly velocity.	Max. velocity: Miles per hour.	Max. velocity: Direction.	Max. velocity: Date
Columbia	30.02	76	......	348	77	4,700	6.3	26	n.	28
Hannibal	30.03	76	......	....	......	5,521	7.4	27	ne.	7
Kansas City	29.99	63	39	347	77	7,133	9.6	31	n.	1
St. Joseph	29.98	71	46	336	74	4,659	6.3	24	n.	28
St. Louis	30.02	68	52	313	69	7,227	9.7	29	s.	23
Springfield	30.03	70	54	315	70	5,889	7.9	23	n.	29
Cairo, Ill	30.00	76	54	....	.....	4,604	6.2	24	ne.	12
Keokuk, Iowa	30.04	75	50	361	80	4,498	6.0	24	sw.	6

COMPARATIVE DATA FOR JULY.

Year.	Temperature: Mean.	Temperature: Departure.	Temperature: Highest.	Temperature: Lowest.	Precipitation: Mean.	Precipitation: Departure.	Precipitation: Greatest in 24 hours.	Precipitation: Total snowfall, unmelted.	Number of Days: With .01 inch or more.	Number of Days: Clear.	Number of Days: Partly Cloudy.	Number of Days: Cloudy.
1888	79.3	+2.3	111	50	3.31	−0.98	......	0	7	....	....	....
1889	77.1	+0.1	107	46	3.75	−0.54	.....	0	8	....	....	....
1890	79.6	+2.6	106	52	2.98	−1.31	......	0	5	....	....	....
1891	72.7	−4.3	103	40	3.55	0.71	......	0	5	....	....	....
1892	75.8	−1.2	107	45	4.99	+0.70	4.75	0	8	12	10	9
1893	77.3	+0.3	101	51	4.91	+0.62	6.44	0	8	14	12	5
1894	76.5	−0.5	109	42	2.48	−1.81	4.90	0	5	18	10	3
1895	74.4	−2.6	106	45	6.79	+2.50	6.52	0	10	10	12	9
1896	77.3	+0.3	108	48	5.87	+1.58	8.00	0	9	15	11	5
1897	78.7	+1.7	106	48	3.22	−1.07	4.65	0	6	19	9	3
1898	76.1	−0.9	104	42	5.58	+1.29	8.15	0	9	16	10	5
1899	76.0	−1.0	102	43	4.51	+0.22	4.48	0	9	15	11	5
1900	76.9	−0.1	102	46	4.11	−0.18	7.03	0	8	17	10	4
1901	85.4	+8.4	116	46	2.02	−2.27	3.78	0	5	19	10	2
1902	77.0	0.0	103	50	4.59	+0.30	5.30	0	8	17	11	3
1903	77.4	+0.4	102	51	3.22	−1.07	3.26	0	8	17	10	4
1904	74.2	2.8	100	47	4.65	+0.36	4.15	0	10	15	11	5
1905	73.4	−3.6	101	48	7.45	+3.16	7.60	0	12	12	10	9
1906	74.7	−2.3	100	48	3.53	+0.76	4.46	0	8	17	10	4
1907	78.4	+1.4	105	47	4.57	+0.28	6.70	0	8	19	8	4
1908	76.5	−0.5	101	49	2.23	−2.06	2.65	0	8	18	9	4
1909	76.7	−0.3	102	41	6.41	+2.12	10.71	0	10	17	8	6
1910	76.8	−0.2	109	46	6.70	+2.41	5.80	0	9	16	9	6
1911	78.0	+1.0	113	43	3.95	−0.34	4.20	0	8	16	9	6
1912	78.8	+1.8	104	52	2.74	−1.55	3.17	0	7	18	9	4
1913	80.2	+3.2	108	47	3.13	−1.16	3.62	0	7	18	9	4
1914	80.5	+3.7	109	45	2.67	−1.66	4.45	0	7	17	9	5
1915	74.6	2.4	102	42	6.05	+1.59	6.77	0	12	14	9	8
1916	81.6	+4.6	109	52	1.25	−3.15	2.55	0	3	25	5	1
1917	77.5	+0.2	107	42	2.96	−1.22	3.40	0	8	20	8	3
1918	77.1	+0.2	110	41	1.76	−2.49	3.75	0	6	19	8	4

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches: Total.	Precipitation, in inches: Departure from the normal.	Precipitation, in inches: Greatest in 24 hours.	Precipitation, in inches: Total snowfall, unmelted.	No. of days: With precip., .01 inch or more.	No. of days: Clear.	No. of days: Partly cloudy.	No. of days: Cloudy.	Prevailing direction of wind.	Observers.
Arlington	15	1.02	−2.34	0.30	0	4	26	0	5	....	Wm. R. Bennett.
Boonville	41	1.46	−2.63	0.64	0	4	21	0	10	se.	C. Randecker.
C. Girardeau	11	0.29	−3.07	0.12	0	3	19	4	8	ne.	D. L. Albert.
Glencoe	1	....	....	....	0	..	..	..	..	......	L. M. Beard.
Hermann	44	1.54	−2.43	0.80	0	6	19	6	6	se.	E. J. Maushund.
New Madrid	24	0.79	−3.21	0.74	0	3	17	3	11	se.	Miss Josie Smith.
Osceola	18	2.91	−2.27	1.70	0	4	19	5	7	......	Wm. E. Mathews.
Pacific	1	0.65	....	0.36	0	4	22	2	7	......	Mark Waters.
Steelville	16	3.15	−0.11	1.80	0	3	22	0	9	sw.	F. Kreamelmeyer.
Tuscumbia	1	0.92	....	0.50	0	4	20	1	10	s.	C. B. Wright.
Union	1	0.71	....	0.30	0	5	17	6	8	nw.	J. Wm. Keller.
Valley Park	1	0.82	....	0.57	0	2	18	9	4	......	Geo. W. Barbour.
Waverly	3	2.14	....	0.70	0	5	19	3	9	sw.	J. W. Cauthorn.

Climatological data for July, 1918.

Stations.	Counties.	Temperature, in degrees Fahr.									Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
		Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	650	37	77.5	2.3	101	27	56	1†	35	2.09	-2.55	1.03	0	1	21	3	7	n.	Louis Benecke.
Clifton Hill	Randolph	731	......	......	......	......	......	53	31		1.55	-2.71	0.50	0	5	22	8	1	......	L. S. Harlan.
Columbia	Boone	781	27	77.2	-0.2	102	27	55	1	35	0.73	-2.92	0.25	0	8	12	16	3	s.	U. S. Weather Bureau.
Fayette	Howard	725	32	79.1	+2.0	108	27	51	31	36	1.17	-2.60	0.40	0	5	......	......	......	......	Prof. T. B. [illegible]
Fulton	Callaway	818	13	77.2[a]	-0.7	106	26	48	31	41	0.46	-3.88	0.21	0	5	23	2	6	s.	Dr. O. M. Weigle.
Gorin	Scotland	700	28	......	......	......	......	......	......	......	1.63	-2.55	0.55	0	9	10	14	7	sw.	J. W. Pulliam.
Hannibal	Marion	531	21	76.2	-1.2	100	26	51	9	31	1.19	-2.56	0.58	0	8	16	11	4	sw.	U. S. Weather Bureau.
Jefferson City	Cole	557	31	77.8	-0.3	101	27	55	31	35	1.46	-2.15	1.02	0	5	23	6	2	s.	Miss [illegible] Scott
Keytesville	Chariton	660	4	......	......	......	......	......	......	......	1.56	......	0.63	0	7	......	......	......	......	J. T. Dewey, M. D.
Kirksville	Adair	969	25	75.6	-0.5	98	20†	50	1	31	2.65	-1.63	1.13	0	9	21	10	0	s.	Prof. Mark Burrows.
Louisiana	Pike	469	39	74.6	-1.1	100	27	46	31	34	1.84	-1.45	0.80	0	6	25	4	2	w.	C. T. Farrell.
Macon	Macon	875	19	76.4	-1.0	103	26	51	10	36	1.65	+0.39	1.75	0	6	26	2	3	se.	Chas. N. Tolman
Mexico††	Audrain	797	39	75.9	-1.4	101	26	50	31	31	1.23	-2.78	0.58	0	3	22	0	9	s.	R. M. Llewellyn.
Oakfield	Franklin	793	36	77.2	-0.6	102	26	55	1†	30	0.91	-3.33	0.32	0	4	14	15	2	s.	E. E. Stevens.
Palmyra	Marion	652	5	76.8	2.3	103	26	51	31	39	1.94	1.57	0.85	0	6	14	9	8	sw.	W. B. Markell.
St. Catherine	Linn	850	4	76.2	......	100	28	53	31	33	3.66	......	0.71	0	7	15	15	1	sw.	L. D. Baker.
St. Charles	St. Charles	456	39	77.5	-0.2	102	26	52	31	33	1.77	-1.73	1.46	0	3	20	6	5	s.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	46	78.4	-0.7	100	26	59	31	24	0.60	-2.83	0.52	0	3	14	12	5	s.	U. S. Weather Bureau
St. Louis (2)	......do	578	5	78.2	......	100	26	58	1	24	0.90	......	0.55	0	3	19	8	4	n.	St. Louis University.
Shelbina	Shelby	779	25	......	......	......	......	......	......	......	2.13	-2.17	0.80	0	1	......	......	......	......	S. G. Parsons.
Steffenville	Lewis	650	21	79.2	+2.0	108	26	51	31	40	1.73	-3.12	0.54	0	5	17	12	2	sw.	Frank Hall.
Unionville	Putnam	1,072	24	75.2	1.5	102	28	50	10†	38	1.89	-2.30	1.55	0	4	21	3	7	n.	Geo. W. Davis.
Warrenton	Warren	865	26	76.4	-1.2	102	26	53	31	33	0.71	-3.22	0.25	0	6	11	14	6	s.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	574	46	76.3	-0.6	97	20†	55	1	28	1.08	-2.95	0.45	0	8	20	9	2	s.	U. S. Weather Bureau.
Section means and extremes				77.0	0.4	108	26	46	31	41	1.62	-2.41	1.75	0	6	19	8	4	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	82.6	+2.5	104	25†	59	1	40	0.65	-2.83	0.50	0	2	26	0	1	s.	H. E. Averill.
Doniphan	Ripley	344	12	77.2	-0.6	104	27	53	13	37	1.01	-1.36	0.71	0	5	21	3	7	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	26	76.8	-0.3	102	25	49	9	39	0.21	-3.38	0.18	0	2	10	16	5	s.	L. M. Bean.
Marble Hill	Bollinger	420	25	77.0	-0.1	100	26	52	12	40	0.40	-4.42	0.30	0	2	17	8	6	s.	Dr. A. F. Hendricks.
Patton (near)	Bollinger	500	2	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	George F. Ellis.
Poplar Bluff	Butler	339	13	77.0	-1.5	102	6	56	14	40	0.74	-2.93	0.35	0	3	22[a]	4[a]	4[a]	......	Miss Belle Kinne.
Cairo, Ill.	Alexander, Ill	359	44	78.0	-0.6	95	24	60	9	27	0.74	-2.71	0.43	0	5	12	6	13	s.	U. S. Weather Bureau.
Section means and extremes				78.1	-0.1	104	25†	40	9	40	0.62	-3.41	0.71	0	3	18	7	6	s.	
Ozark Plateau.																				
Arcadia	Iron	925	39	74.6	-1.2	103	26†	50	31	38	0.47	-3.91	0.13	0	6	18	11	2	sw.	Arcadia College.
Birchtree	Shannon	1,078	23	76.2	0.0	102	27	53	1	34	1.35	-2.95	1.00	0	2	24	3	4	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	29	76.1	-0.7	102	27	53	1	36	3.87	+0.10	1.43	0	6	16	10	5	sw.	K. H. Brown.
Cassville	Barry	1,500	6	75.8	......	103	25†	41	1	45	1.34	-3.14	0.65	0	4	25	0	6	s.	William Talbert.
Crocker††	Pulaski	1,126	6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Roy W. Reed.
Dean	McDonald	1,000	18	76.0[d]	-1.5	104	28	52	2	42	1.94	-2.18	0.88	0	5	21[c]	3[c]	4[c]	......	H. E. Dean.
Eldon	Miller	934	16	75.3	-1.6	102	27	51	1†	40	1.15	-2.86	0.52	0	5	9	18	4	ne.	E. H. Shepherd.
Farmington	Reynolds	918	3	76.9[b]	......	99	28	51	13	33	1.48	......	0.61	0	4	8[b]	13[b]	2[b]	ne.	Robert Forsyth.
Gano	Dent	1,250	13	75.2	-1.5	98	26	52	11	36	1.80	-1.98	1.13	0	4	21	9	1	s.	A. C. Leach.
Goodland	Iron	1,000	12	74.7	-0.8	103	27	46	13	42	0.25	-4.24	0.15	0	2	18	11	2	s	F. M. Adams.
Hollister	Taney	735	8	78.0	-1.3	106	28	52	2	43	2.62	-1.44	1.10	0	3	15	0	16	sw.	W. P. Chapmann.
Houston	Texas	1,280	24	74.9	-1.0	103	27	52	11	38	3.99	-0.30	1.39	0	5	22	5	4	se.	R. F. Harmon.
Koshkonong††	Oregon	958	16	77.1	-0.9	103	27	55	13	34	1.33	-2.65	0.50	0	6	21	6	4	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	28	74.7	-2.2	101	28	53	1†	34	1.94	-2.30	0.96	0	9	26	3	2	s.	Leonard E. Dickerson.
Lockwood	Dade	1,078	22	77.6	+0.5	101	27†	55	1	33	2.80	-2.44	2.05	0	2	24	4	3	se.	C. S. Crow.
Mountain Grove	Wright	1,490	18	74.2	-1.8	98	27	51	1	31	2.02	-2.08	0.62	0	9	15	8	8	se.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	31	76.6	-1.0	101	28	49	1	39	1.28	-3.01	0.43	0	7	26	0	5	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	75.8	-1.3	102	27	50	9	37	0.80	-3.47	0.34	0	4	20	10	1	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	29	76.2	-0.2	99	27	57	10	25	1.11	-3.68	0.51	0	10	18	9	4	se.	U. S. Weather Bureau.
Section means and extremes				75.9	-1.0	106	28	41	1	45	1.75	-2.50	2.05	0	5	19	7	5	s.	
Southwest Plain.																				
Amoret	Bates	831	8	79.2	+1.9	105	7†	53	1	42	2.28	-2.19	1.40	0	8	20	5	6	sw.	Darby Fruit Farm.
Appleton City	St. Clair	853	26	78.6	+0.4	104	27†	54	1	33	2.72	-2.26	0.92	0	8	20	8	3	ne.	W. G. Bigelow.
Clinton	Henry	765	30	78.4	+1.4	104	27†	53	1	38	3.31	-0.85	1.77	0	6	18	12	1	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	44	77.8	+0.1	110	27	52	1	42	1.95	-2.11	1.00	0	8	13	0	18	sw.	A. J. Sharp.
Lamar	Barton	980	36	78.2	-0.2	105	28	53	1	38	1.36	-3.01	0.61	0	4	15	12	4	s.	Joe W. Springer.
Lamonte	Pettis	863	28	77.4	-2.1	104	27†	51	9†	38	1.27	-3.05	0.67	0	2	20	9	2	sw.	J. Ed. Hall.
Marshall	Saline	779	26	78.3	+1.3	107	27†	54	9†	38	1.27	-3.01	0.72	0	4	15	4	2	sw.	Dr. W. H. Black.
Nevada	Vernon	860	23	79.4	-1.1	103	26	55	1†	33	1.77	-2.39	1.10	0	5	16	9	6	s	George A. Kaupp.
Warrensburg	Johnson	883	38	79.5	+1.4	107	27	57	1†	34	1.87	-2.24	0.60	0	9	16	11	4	sw.	Geo. H. Collins.
Warsaw	Benton	715	12	77.0	-1.2	106	26	50	11	41	2.11	-2.57	0.75	0	7	21	10	0	se.	J. R. Smith, M. D.
Section means and extremes				78.4	+0.2	110	27	50	1†	42	1.89	-2.37	1.77	0	6	17	9	5	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	80.2	+1.3	106	27	55	31	35	1.55	-2.62	0.68	0	5	21	10	0	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	77.3	+1.6	104	28	50	1	36	2.17	-2.34	0.67	0	6	16	10	5	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	77.6	......	107	27	52	1	39	1.34	-3.81	0.45	0	6	17	7	7	sw.	Dr. J. R. Campbell.
Conception	Nodaway	982	32	77.3	+1.4	103	25†	55	30	32	1.56	-2.79	0.62	0	6	18	12	1	se.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	17	......	......	......	......	......	......	......	2.96	-1.70	1.75	0	7	21	6	4	s.	Robert R. Wynne, Jr.
Grant City	Worth	1,134	24	76.9	+1.3	104	28	51	1	36	4.94	0.00	3.75	0	2	24	5	2	s.	W. H. Campbell.
Kansas City	Jackson	963	28	78.8	+1.2	102	28	60	8	32	1.62	-3.02	0.51	0	9	18	8	5	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,020	26	77.6	+0.9	102	28	54	30	30	2.07	-2.04	0.82	0	7	23	4	4	sw.	J. F. Sharp.
Lexington	Lafayette	688	35	78.6	+1.8	104	26†	51	1	34	1.24	-3.81	0.38	0	5	18	0	13	s.	J. W. Keithley.
Liberty	Clay	864	28	78.5[a]	+0.8	104	27†	......	......	......	2.12	-2.28	0.51	0	9	24	6	1	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	75.9	+0.4	102	28	51	1	40	1.78	-3.93	0.70	0	8	21	4	6	s.	J. R. Brink.
Oregon	Holt	1,048	61	76.8	+1.4	100	28	53	30	33	1.88	-2.50	0.80	0	7	17	13	1	se.	Tom Curry.
St. Joseph	Buchanan	967	45	78.6	......	101	27	56	1	31	1.61	-2.27	0.86	0	8	17	8	6	s.	U. S. Weather Bureau.
Tarkio	Atchison	976	5	76.6	-0.2	97	28	53	1†	31	1.87	+1.03	2.56	0	6	21	7	3	sw.	John F. Frazier.
Trenton	Grundy	822	22	77.2	+0.7	100	27	55	30	34	1.84	-2.14	0.94	0	5	22	7	2	s.	W. H. Estes.
Section means and extremes				77.7	+1.0	106	27	50	1	40	2.26	-2.28	3.75	0	7	20	7	4	s.	
State means and extremes				77.1	+0.2	110	27	41	1	45	1.76	-2.49	3.75	0	6	19	8	4	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, [b] represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for July, 1918.

Stations.	Watersheds.	Day of month.																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
nville	Missouri					.12													.64					T.	.12					.58			1.46
nswick	Grand						.57											.26							.23					1.03			2.09
ton Hill	Chariton					.50												.50							.38				.01	.16			1.55
ambia***	Missouri					.08	T.									.01		.11	.14				.01		.25				.03	.10			0.73
ette	do					.21													.40					T.	.20	.15				.21			1.17
ton	do					.03													.18						.21	.01				.03			0.46
neoe	Meramec																																
in	Mississippi					.18	.05	.30								.03	.08		.06					.15	.55					.23			1.63
nnibal***	do					.11	T.	.04								T.		.24	.34					.05	.31				.06	.01			1.19
rmann	Missouri						T.	T.								T.			.15	.01				T.	.80	.02	.55			.01			1.51
erson City	do																		.26	.01				1.02	.06					.12			1.47
tesville	Chariton					.63												.07	.27						.12		.02		.07	.38			1.56
ssville	Mississippi					.19	.09											.08	.12					.22	1.13	.16			.68	.28			2.95
isiana	do					.22			.03							T.			.58					.80	.15			T.		.06			1.84
on	Chariton					.08	1.49	.01											.34						.38					1.75			4.05
xico	Mississippi																		.55						.58					.10			1.23
field	Meramec					T.			T.							T.		T.	.32				.14	.29	.16					T.			0.91
ie	do						T.												.16					.08	.36	.05							0.65
yra	Mississippi					.02	.85	.02											.22						.70					.13			1.94
atherine	Grand					.71	T.	T.							T.	T.		.12	.16					.47	.36				.67	.57			3.06
Charles	Missouri							T.											.11					1.16	.20								1.77
Louis (1)***	Mississippi							T.	T.							T.	T.	T.	.08				T.	.16	.36								0.60
Louis (2)	do							T.	T.							T.			.06				T.	.29	.55								0.90
lina	do					.74										.55									.80					.34			2.43
eville	do					.54	T.	T.								T.			.34					.10	.45				T.	.30			1.73
on	Meramec						.02												.13					T.	.30	.16	.10						0.71
nville	Grand					T.		T.											.30				T.	.04					.45	1.10			1.89
ley Park	Meramec																		.25						.57								0.82
renton	Mississippi						.02		.02										.23						.25	.09	.10						0.71
kuk, Iowa***	do					.09	.33	.02								.04			.01					.18	.27				.14				1.08
Southeast Lowlands.																																	
Girardeau	Mississippi																		.12	.05					.12								0.29
uthersville	do								T.		T.						T.	.15	.50														0.65
iphan	Black										T.						.05	.15	.71					.05	.05								1.01
son	Mississippi																	.18					.03										0.21
ble Hill	do									.10								.30															0.40
Madrid	do																	.01	.74	.01													0.79
on (near)	do																																
lar Bluff	Black																T.		.35	.29				.10	T.	T.							0.74
o, Ill.***	Mississippi								T.								.04	.02	.23			.43		T.	T.		T.	T.		.02			0.74
Ozark Plateau.																																	
dia	Gasconade							T.											.10	.03			T.		.11	.01	T.	.09			.13		0.47
gton	Black																		.30						.29	.18				.25			1.02
tree	Osage																	.35	1.00														1.35
var	White										.02					T.	.80	1.27	T.						.04				.31	1.43			3.87
ville	Gasconade										.30	.21						.15												.65			1.31
ker	Neosho																																
	Osage										.34						.19		.88						T.				.34	.18			1.94
n	Black																	.17	.15										.21	.62			1.15
ington	Meramec																T.		.06					.61	.34	T.				.47			1.18
	Black																	T.	.15				.36		.16	1.13							1.80
lland	White																		.15							.10							0.25
ister	Gasconade											.62				.90	1.10																2.62
ston	Mississippi								T.		.13							1.25	1.39					T.		.90				.32			3.99
konong	Black										.20						.16	.50	.43				.02	.02									1.33
non	Osage								.05		.07	.15					.05	.06	.96	.05				.17	T.				.38	T.			1.94
wood	do										T.													.75	T.					2.05			2.80
ntain Grove	White											.26					.25	.06	.41	.04				T.		.62	.08			.23	.04		2.02
Vernon	Neosho																																
sho	do										.28	.20					T.	.19	.01				.07	.10						.43			1.28
	Meramec						T.		T.	T.									.34						.27	T.			.10	.09	T.		0.80
ngfield***	White						.01		T.	.01	.12					T.	.08	.23	.07				T.	.06	.02					.03	.48		1.11
ville	Meramec																		.35						1.00		1.80						3.15
umbia	Osage						.06					T.						.32							.04					.50			0.92
Northwest Plain.																																	
ret	Osage					T.		T.		.04	.05					.17	.25	1.10	.03					.24						.40			2.28
eton City	do				T.				T.	.02					T.	.10	T.	.92	.01					.21	.45	T.			.52	.49			2.72
on	do										.10							.72	.25				.02		.45				1.77				3.31
isonville	do						.03				T.	.12					.16	.07	.25		.20	.12								1.00			1.95
ar	Neosho											.09					T.	.30	.61										.36				1.36
onte	Missouri					T.					T.				T.			T.	.67				T.	T.						.60			1.27
hall	do					.15									T.	T.		T.	.20					T.	.20					.72			1.27
da	Osage										.03					.15		1.10						.13					T.	.36			1.77
la	do																	.07	1.04						.10					1.70			2.91
ensburg	Missouri					.10					.21					.04		.06	.20				.06	.20	.60					.40			1.87
aw	Osage			.03		T.			.27							T.		.75	.15			T.	.10	.21						.60			2.11
erly	Missouri					T.	.13				T.					T.			.31					.29	.70					.68			2.14
Northwest Plateau.																																	
on	Grand					.15													.25					.35	.33				.47				1.55
ny	do					.42	T.	T.							T.	T.	.67	.06	.30				.22					T.		.50			2.17
cothe	do					.45	.20												.07					.12	.20					.30			1.34
ption	Missouri				.08	.62									T.	.05		.55	.04				T.	T.			T.	T.		.22		T.	1.56
tin	Grand					1.75										.01		.20	.13				.03	.38	.05					.38			2.96
City	do					.06	.40	T.	T.						T.			3.75	.04				T.	T.	.10				.38	.21		T.	4.94
s City***	Missouri				T.	.24			T.	T.	.21				T.	.20		.46					.08	.02	.10				.47	.04			1.82
r	Grand					.82		.10									.05		.22					.03	.12				.73				2.07
gton	Missouri						.20					.06							.38					T.	.23					.37			1.24
ty	do					.38					.51					.02		.07	.30			.15	.39	.10	.40								2.32
ville	do					.70			T.							.05			.62					.01	.12		.05			.18		.05	1.78
n	do				.80					T.	.05							.21					T.	T.	.30	.07	.15		.30				1.88
eph***	do				.75	.11		T.		T.	.07		T.		.01	.21		.24					T.		.09			T.	.13			T.	1.61
o	do				.34										.12			1.04					.38		2.56					.43			4.87
on	Grand				.31	T.								T.	T.			.34					.03	.22					.94				1.84

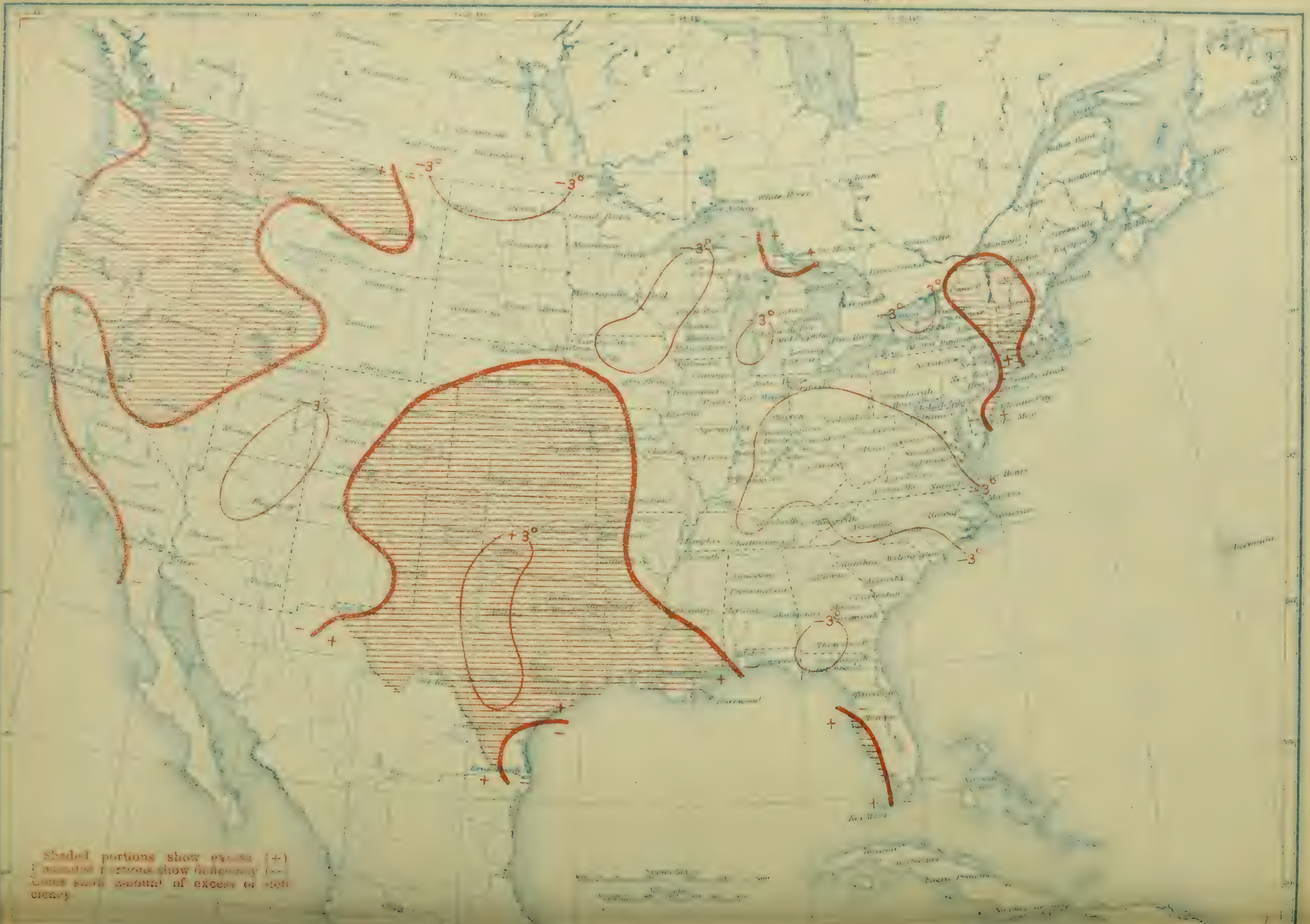
Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch
egular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
of fall not recorded.

Daily temperatures for July, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	86	91	92	89	78	91	93	89	82	85	86	[illegible]	87	88	86	90	81	[illegible]	94	96	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	82	84
	Minimum	56	59	66	67	73	67	68	64	57	59	60	59	59	61	71	69	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	83	89	92	92	89	93	91	79	82	82	84	84	85	89	[illegible]	88	[illegible]	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	84
	Minimum	55	61	64	68	69	67	67	60	55	57	58	57	56	61	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	87	90	95	92	90	91	96	80	84	86	88	92	98	91	[illegible]	88	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	63	64	67	73	72	76	63	57	58	60	70	68	68	68	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	81	88	92	90	80	90	83	77	83	80	83	79	[illegible]	96	89	81	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	64	67	72	68	66	62	59	51	57	56	61	56	61	73	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	87	88	91	90	88	91	97	82	86	83	88	86	91	[illegible]	87	91	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	64	65	66	67	68	69	61	58	58	58	58	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	73	71	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	81	90	92	88	86	91	83	76	79	83	85	[illegible]	86	86	[illegible]	91	[illegible]	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	62	61	70	69	65	62	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	79	86	86	88	88	90	83	83	80	80	83	80	83	88	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	52	57	61	61	56	65	68	57	50	60	50	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	71	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	85	91	93	91	82	92	85	78	81	82	85	82	86	96	86	84	[illegible]	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	57	62	66	69	65	67	58	51	51	55	50	56	58	63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	83	88	91	93	83	93	89	78	81	86	80	82	87	91	87	84	81	[illegible]	91	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	54	55	63	65	68	64	65	57	50	55	55	56	53	57	67	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	84	88	92	92	89	93	89	79	85	83	87	87	87	92	93	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	60	65	66	70	65	72	60	57	57	[illegible]	58	58	64	68	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	73	71	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	81	87	89	90	84	88	84	77	83	81	84	86	85	87	89	85	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	75	62	62	69	70	65	62	58	56	56	56	53	58	64	71	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	71	71	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	81	89	93	92	88	93	83	78	81	81	85	80	85	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	66	71	72	72	69	67	61	61	65	66	62	61	[illegible]	71	72	67	[illegible]	[illegible]	[illegible]	[illegible]	74	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville §§	Maximum	82	90	91	90	86	90	86	80	81	87	86	[illegible]	90	88	91	[illegible]	86	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	53	55	62	64	66	61	66	51	52	50	51	53	[illegible]	[illegible]	62	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	64	[illegible]	70	70	71	70	72	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	83	89	91	90	85	92	89	78	81	82	85	82	88	90	88	[illegible]	[illegible]	85	[illegible]	[illegible]	[illegible]	98	[illegible]	88	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	56	60	61	64	66	65	66	59	58	57	59	58	55	[illegible]	[illegible]	69	[illegible]	65	62	[illegible]	65	67	69	[illegible]	70	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]
Southeast Lowlands.																																
Caruthersville	Maximum	92	97	100	101	102	102	103	91	93	85	95	93	96	99	98	98	92	84	98	[illegible]	92	95	101	[illegible]	104	102	[illegible]	103	[illegible]	[illegible]	[illegible]
	Minimum	59	62	62	65	62	73	73	72	60	66	61	64	60	65	[illegible]	77	72	67	65	[illegible]	72	65	72	76	72	77	77	77	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	85	90	92	95	97	68	99	95	88	84	89	89	88	92	95	98	92	[illegible]	89	92	88	95	98	97	102	[illegible]	104	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	56	58	60	60	69	66	70	55	64	56	57	53	56	57	69	70	64	62	62	64	[illegible]	67	68	73	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]
Jackson	Maximum	83	93	91	93	93	93	94	91	86	82	96	89	90	93	91	[illegible]	[illegible]	[illegible]	94	94	94	93	98	[illegible]	102	[illegible]	[illegible]	[illegible]	92	86	86
	Minimum	53	54	55	58	59	65	66	67	49	58	52	51	73	54	56	70	64	[illegible]	58	57	60	64	[illegible]	69	72	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	90	94	95	90	95	93	98	98	95	70	86	84	90	93	96	92	83	89	[illegible]	[illegible]	89	90	92	95	95	[illegible]	[illegible]	95	94	[illegible]	94
	Minimum	53	58	55	54	60	65	67	58	55	53	55	52	55	57	58	72	[illegible]	[illegible]	60	[illegible]	62	60	62	58	[illegible]	[illegible]	[illegible]	77	[illegible]	[illegible]	70
Poplar Bluff §§	Maximum	85	87	90	92	95	102	101	92	85	80	92	87	86	89	91	97	85	85	89	91	88	92	94	95	96	97	94	94	89	89	[illegible]
	Minimum	56	56	58	60	60	62	69	70	58	58	59	59	56	56	60	60	71	64	62	63	64	66	68	69	71	73	72	[illegible]	71	[illegible]	[illegible]
Ozark Plateau.																																
Arcadia §§	Maximum	82	87	90	91	93	90	90	76	81	79	86	83	87	91	87	95	84	85	90	95	89	95	97	95	96	103	103	95	93	85	85
	Minimum	52	53	59	58	59	64	67	67	49	54	51	51	48	53	56	62	[illegible]	65	[illegible]	55	59	[illegible]	68	68	70	69	68	64	67	[illegible]	50
Birchtree	Maximum	82	85	87	89	91	92	95	91	85	79	87	86	85	90	87	96	88	82	86	91	90	91	95	94	96	98	102	98	96	88	86
	Minimum	53	56	61	62	63	66	67	66	55	59	58	58	54	59	61	68	65	61	62	61	61	65	64	[illegible]	70	73	68	70	68	[illegible]	55
Cassville	Maximum	85	87	90	93	92	95	99	97	89	85	80	87	87	88	92	85	87	86	87	92	91	97	84	89	103	103	102	[illegible]	[illegible]	88	88
	Minimum	41	51	64	55	60	67	61	64	53	62	59	62	59	57	59	66	69	64	54	55	56	63	66	71	68	58	61	62	68	[illegible]	[illegible]
Eldon	Maximum	75	87	90	92	90	92	100	84	82	82	86	88	90	92	86	91	80	85	91	93	97	95	90	85	98	100	102	101	[illegible]	84	81
	Minimum	51	57	57	61	53	65	67	59	51	51	53	55	50	57	62	60	65	[illegible]	56	79	60	[illegible]	67	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	67	52
Farmington	Maximum	....	....	....	....	....	....	....	....	86	84	87	82	89	91	90	93	82	84	89	94	91	96	89	93	89	90	97	[illegible]	[illegible]	82	84
	Minimum	....	....	....	....	....	....	....	....	56	63	60	58	51	58	61	70	65	67	64	[illegible]	61	72	69	69	63	72	72	[illegible]	[illegible]	64	[illegible]
Gano	Maximum	80	81	90	89	89	94	96	82	84	78	85	81	87	81	86	95	83	85	89	92	96	96	93	90	90	98	96	95	[illegible]	80	79
	Minimum	53	57	62	62	65	66	59	62	62	57	52	54	59	55	62	69	65	64	60	58	60	65	64	67	66	70	70	78	[illegible]	60	[illegible]
Hollister	Maximum	88	90	93	94	96	100	101	102	100	82	84	92	92	95	97	88	84	86	88	91	93	96	92	94	98	103	105	106	91	[illegible]	94
	Minimum	56	52	55	54	53	62	66	69	68	66	68	58	58	56	64	68	67	60	56	58	61	53	71	58	62	[illegible]	[illegible]	77	78	67	64
Koshkonong	Maximum	83	87	90	93	91	93	95	86	84	77	85	87	84	90	91	94	84	80	88	90	93	88	92	95	98	99	105	98	85	91	87
	Minimum	56	60	63	63	65	68	69	69	57	59	60	61	55	59	69	67	69	63	64	66	67	64	67	69	73	74	69	70	70	65	58
Lebanon §§	Maximum	84	85	87	88	90	89	95	80	84	73	83	84	85	87	88	93	76	84	89	92	90	90	89	85	96	100	101	98	81	84	84
	Minimum	53	54	59	61	64	66	70	63	53	53	57	55	55	57	65	65	69	64	58	58	60	66	66	66	71	70	70	70	68	59	58
Mountain Grove §§	Maximum	81	82	86	86	91	89	93	79	83	69	82	84	83	85	89	91	76	81	85	90	89	88	90	94	90	96	98	96	86	84	83
	Minimum	51	55	60	62	64	67	68	67	52	54	56	57	57	57	67	65	67	62	59	60	62	64	66	67	68	68	70	67	67	61	54
Neosho	Maximum	84	88	89	93	92	94	99	98	89	89	83	88	88	91	93	92	86	87	87	94	94	96	95	85	99	100	100	101	93	86	88
	Minimum	49	54	59	60	66	66	66	65	53	62	60	62	58	61	62	69	69	64	52	55	56	64	67	70	69	63	66	63	68	58	58
Rolla §§	Maximum	83	87	90	89	90	92	97	80	87	79	85	86	84	85	85	92	83	85	87	91	90	96	97	92	96	102	100	99	90	86	87
	Minimum	55	56	59	65	63	69	70	62	50	58	54	57	60	59	56	60	66	64	63	62	62	67	68	69	70	71	72	69	67	51	55
Springfield	Maximum	80	83	86	88	89	89	94	81	84	70	79	81	83	84	85	90	77	80	84	88	88	92	84	85	97	97	99	98	83	86	83
	Minimum	59	62	64	66	69	73	71	63	60	57	61	65	62	66	70	68	65	64	63	67	68	70	69	73	75	75	76	73	67	65	59
Southwest Plain.																																
Amoret	Maximum	91	96	97	102	97	100	105	92	90	85	90	93	95	91	87	95	74	86	94	95	96	98	93	98	99	104	105	101	95	90	90
	Minimum	53	59	67	60	70	63	74	61	56	59	59	60	60	66	66	65	66	64	60	67	64	64	69	67	68	70	70	72	70	59	57
Appleton City	Maximum	87	91	92	95	91	96	102	90	87	80	86	89	91	90	87	94	80	85	90	94	93	97	83	90	100	102	104	104	87	83	84
	Minimum	54	61	63	67	69	70	73	63	58	61	62	62	60	70	68	68	66	65	63	65	68	70	70	73	74	71	74	72	69	61	59
Clinton	Maximum	89	90	93	97	92	97	102	95	93	84	86	91	92	92	83	95	89	85	93	95	95	98	85	92	102	102	104	104	88	85	87
	Minimum	53	60	62	65	68	65	75	62	55	60	57	59	58	66	69	65	67	65	58	62	65	66	70	72	70	70	68	70	68	60	57
Harrisonville §§	Maximum	90	95	95	99	97	99	100	85	87	86	87	90	93	91	93	91	75	84	98	98	99	101	82	98	104	106	110	105	86	84	86
	Minimum	52	53	62	63	67	64	65	61	54	54	59	58	60	62	70	64	65	65	58	58	62	68	70	68	69	72	71	70	68	60	58
Lamar §§	Maximum	85	90	92	95	95	96	101	84	90	72	85	90	91	92	93	93	80	85	90	93	95	98	82	87	102	103	104	105	88	87	88
	Minimum	52	59	62	65	65	72	69	67	54	65	61	65	63	64	65	68	70	65	69	60	63	70	70	76	71	65	67	67	67	60	59
Lamonte	Maximum	88	90	91	94	92	97	100	82	85	80	87	89	90	92	85	91	79	73	94	97	94	99	86	95	102	103	104	104	87	82	89
	Minimum	52	65	62	71	69	65	66	60	51	60	52	51	59	66	70	61	70	66	65	65	66	69	70	72	72	73	70	70	70	52	51
Marshall	Maximum	86	90	91	93	86	97	99	83	86	83	89	88	90	92	88	92	83	87	95	99	86	101	95	97	103	104	107	107	86	84	85
	Minimum	58	60	61	69	72	66	74	60	54	58	60	59	54	62	67	65	68	66	60	63	65	64	71	72	70	71	69	73	68	59	55
Warrensburg	Maximum	91	95	95	98	89	97	102	91	82	81	89	90	92	95	86	91	86	85	94	100	98	102	88	96	104	105	107	104	88	81	88
	Minimum	57	63	64	68	71	70	72	60	57	60	57	58	58	66	72	67	65	65	61	68	68	72	70	71	72	74	75	72	67	59	58
Warsaw	Maximum	87	92	93	95	92	95	100	90	80	80	87	89	88	90	87	95	86	86	92	94	93	99	90	92	101	103	106	104	87	87	88
	Minimum	50	56	57	68	70	64	75	61	50	62	55	54	52	61	62	69	69	58	55	60	63	65	71	77	68	64	65	66	66	57	52
Northwest Plateau.																																
Chillicothe §§	Maximum	87	92	93	93	82	93	95	82	85	83	86	86	89	91	96	90	83	86	97	99	97	101	90	98	103	103	107	106	88	84	86
	Minimum	52	59	64	69	70	67	70	60	51	55	56	55	59	63	70	65	70	61	58	62	62	62	71	66	70	70	71	75	68	53	53
Grant City	Maximum	90	96	95	99	84	86	86	79	83	82	85	87	90	88	94	88	80	85	93	97	95	97	89	96	102	96	99	104	81	88	85
	Minimum	54	64	62	66	69	65	61	58	55	55	58	59	61	60	66	66	65	60	63	67	68	66	70	67	70	70	75	68	65	55	59
Kansas City	Maximum	87	94	94	96	80	93	91	80	82	78	83	85	90	88	85	87	78	83	92	94	91	94	83	91	100	100	102	102	84	80	85
	Minimum	61	69	71	71	70	68	63	60	66	61	62	67	66	70	67	72	66	65	69	63	75	72	73	68	76	81	80	70	68	61	61
Kidder §§	Maximum	83	86	92	94	84	89	88	80	81	81	82	84	87	89	87	85	80	84	94	95	95	97	90	97	101	100	101	102	82	80	84
	Minimum	60	62	62	70	71	69	76	69	60	61	60	59	60	69	70	67	70	63	62	71	70	71	75	67	71	75	74	76	67	54	55
Lexington §§	Maximum	86	92	92	96	82	96	96	82	85	80	87	87	90	90	86	90	80	85	93	96	95	98	87	95	100	101	104	104	86	84	86
	Minimum	54	65	67	70	72	65	77	60	55	62	56	57	62	67	72	68	70	65	61	70	67	70	72	70	74	75	70	75	70	60	58
Maryville §§	Maximum	87	93	93	95	94	86	89	79	83	82	83	88	86	90	92	92	83	85	92	95	95	95	95	94	101	92	100	102	83	82	87
	Minimum	51	53	61	66	67	66	66	55	55	56	54	55	60	61	69	65	65	60	57	57	64	67	68	65	65	70	69	72	65	52	53
Oregon	Maximum	87	93	91	97	84	89	90	81	81	79	85	86	89	86	93	88	81	84	93	96	95	98	89	93	98	94	98	100	85	81	87
	Minimum	54	62	67	70	68	66	61	56	59	58	58	60	64	68	68	61	65	59	58	66	69	70	71	64	72	71	71	74	64	53	58
St. Joseph	Maximum	87	94	95	97	83	91	92	82	81	79	85	88	89	88	88	88	78	84	93	91	99	95	86	95	101	97	101	100	85	84	88
	Minimum	56	68	72	72	72	70	62	60	60	62	58	63	65	72	68	70	67	61	64	70	70	71	75	67	77	75	78	71	67	58	60
Trenton	Maximum	87	89	90	91	86	91	90	77	81	80	82	83	85	91	88	87	85	82	89	92	92	95	90	95	97	96	100	100	93	80	82
	Minimum	56	66	67	69	71	68	65	60	58	58	59	59	60	66	71	76	68	64	60	58	71	70	74	70	74	76	74	72	68	55	56

etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge the preceding day, on which it almost always occurs.

Departure of the Mean Temperature from the Normal, July, 1918.


Shaded portions show excess (+)
Unshaded portions show deficiency (−)
Lines show amount of excess or deficiency
+3°
−3°
+
−

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR JULY, 1918, AT THE UNIVERSITY OF SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 53 and 54.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a. m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B. W. G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standard described in Circular L. Horizontal distance of the anemometer pan, 2 inches. Height of cups of anemometer above rim of pa inches. The instrument shelter is 100 feet southeast of the pan; he of thermometers above ground, 11 feet. Distance of rain gage from 2.6 feet. The ground in the immediate vicinity of the pan slopes to north, average 5 per cent grade. The soil is covered by blue grass being part of the University campus. There are no bodies of water n nor are there any irrigation projects under way nearby. The gen topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising offi being George Reeder, Meteorologist and Section Director. The obse tions in the table herewith, were taken by Orlin R. Rog Observer, Weather Bureau. This is one of the "Class A" stations signed to furnish practical information relative to evaporation. Full complete climatic records have been made at Columbia, Mo., by Weather Bureau for about 28 years. These records are published by are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for July, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Daily evaporation	.250	.265	.314	.301	.244	.069	.222	.285	.258	.243	.218	.286	.156	.267	.256	.126
Daily wind movement	54	27	32	27	28	38	31	18	31	36	23	23	27	19	17	17

Date.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Daily evaporation	.264	.100	.195	.252	.271	.308	.266	.286	.205	.302	.275	.326	.277	.310	.28
Daily wind movement	31	18	23	21	18	22	25	33	26	25	29	21	33	43	41

*Total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian summer time.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

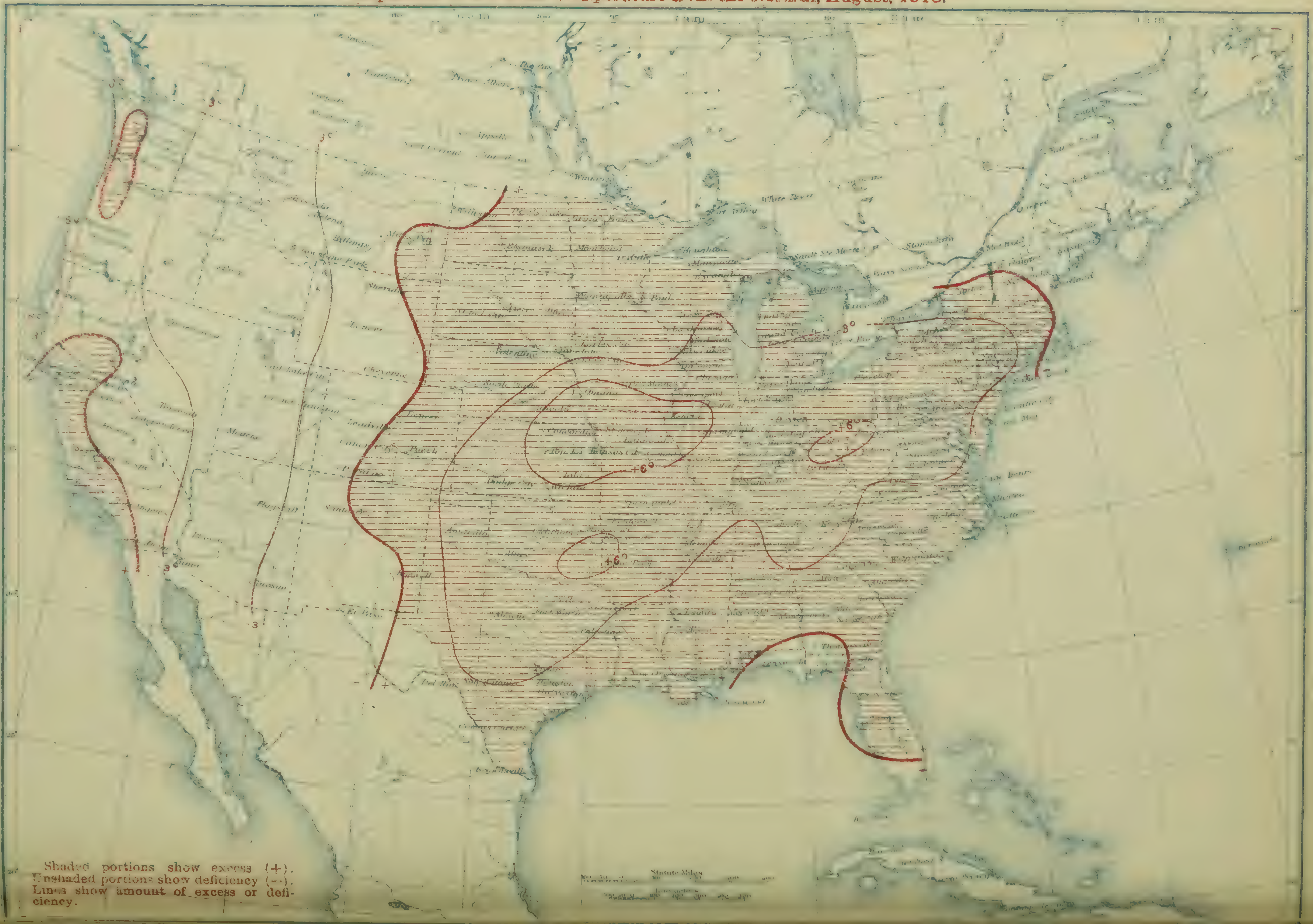
AUGUST, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
SEPT. 25, 1918.

Departure of the Mean Temperature from the Normal, August, 1918.


+6°
+6°
+6°
8°
3°
3
+
−
Statute Miles
Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

ol. XXII. Columbia, Mo., August, 1918. No. 8.

GENERAL SUMMARY.

The steadily increasing warmth and persistent dry weather of uly culminated in one of the most disastrous heat waves and roughts during the first ten days of August that probably has ver occurred in Missouri. Fortunately, the drought began to eak and the heat mitigate somewhat in the second week, and ereafter showers were frequent and more or less general, alough the heat was abnormal to the close of the month.

Corn, notwithstanding the exceptionally dry July, was in fair good condition, although in immediate need of rain, at the ose of that month, deteriorated to nearly a complete failure y the end of the first week in August, probably one of most apid and decided losses in prospects ever known in this State. astures, meadows, and all minor crops suffered accordingly, ut the first two began to revive toward the close of the month, specially where rains were heavy.

TEMPERATURE.

The monthly mean for the State, as determined from the ecords of 68 stations, was 81.8°. The departure from normal r 63 stations having 10 or more year's record was plus 5.8°. ly one other August in the past 20 years (1913) experienced higher monthly mean than the present month. There were ly seven stations with a mean temperature under 80°; and stations experienced maximum temperatures of 100° or gher on from three to 20 days. At four stations the maximum ached 111°; at 20 stations 108° or 109° occurred, and a total 36 stations gave an average of 108°. The record of 111 occurred in August once before (at Gorin, 1894) but in the prest month this high record occurred at four stations. Based on the average maximum temperatures, the present month the warmest August on record.

PRECIPITATION.

The average precipitation, 83 stations reporting was 3.34 ches. The departure from normal for 73 stations having 10 more years' record was minus 0.27 inch. It was the driest gust since 1913. Although after the 8th showers were frequent, general drought conditions were not entirely removed at close of the month. The western sections were the driest. ecipitation in the northeastern plain, and Ozark Plateau was out normal. The first ten days of August were extremely t and dry, with hot winds, and the resulting damage to vegeion was the most widespread and complete probably ever own in so short a period of time.

EVAPORATION.

he total evaporation, at Columbia, Mo., was 7.28 inches; total preitation, 7.83 inches; total wind movement over the surface of the pan, miles, and the mean temperature, 82°. During the the same month 917, these data were, in order named, 5.49 inches; 5.27 inches; 840 es, and 72°.

WIND.

he prevailing winds were from the south. Average movement, based n the records of eight stations equipped with anemometers, was 6182 es, or 8.3 miles an hour, and about 22 per cent above normal. A n wind occurred at St. Louis on the 12th, and at Springfield, Kansas , and St. Joseph on the 30th.

SUNSHINE AND CLOUDINESS.

he average number of hours of sunshine for the State, based upon records of six stations equipped with sunshine recorders, was 295, or per cent of the possible and about 1 per cent below normal.

MISCELLANEOUS PHENOMENA.

Hail---At Kansas City, and Liberty on the afternoon of the 29th. A damaging hail storm occurred just west of Bolivar on the 30th, covering a considerable area. Halos, solar---6th, and 18th. Thunderstorms (local)---2d, 4th, 9th, 11th, 22d, 23d, 24th, 25th, and 26th. (More or less general)---8th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 28th, 29th, and 30th.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (reduced).	Mean relative humidity.		Sunshine.		Wind.		Max. velocity.		
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Miles per hour.	Direction.	Date.
Columbia	29.96	78	......	282	67	4,957	6.6	36	w	15
Hannibal	29.97	75	..		....	6,328	8.5	48	w	30
Kansas City	29.93	[illegible]	42	328	77	7,621	10.1	47	se	16
St. Joseph	[illegible]	71	45	297	70	5,285	7.1	60	nw.	30
St. Louis	29.98	70	55	269	63	8,820	11.9	50	[illegible]	12
Springfield	29.99	71	56	272	65	6,711	9.1	58	nw.	29
[illegible]	29.99	79	60			4,995	6.7	35	nw	9
Keokuk, Iowa	29.97	75	53	324	76	4,822	6.5	34	sw.	10

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall (unmelted).	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	74.0	—1.6	110	48	7.25	+3.80	....	0	11			....
1889	[illegible]	—2.1	102	52	4.96	1.13	.	0	10	..	..	....
1890	[illegible]	—2.3	104	49	1.84	.3	....	0	9	...	....	....
1891	73.2	2.1	108	38	5.31	1.89		0	8	...	...	...
1892	74.3	—1.3	109	50	2.42	—1.63	1.55	0	6	17	8	6
1893	[illegible]	2.8	110	40	2.20	—1.25	5.60	0	4	18	10	3
1894	[illegible]	+1.4	111	39	[illegible]	—1.87	3.07	0	5	15	16	1
1895	75.3	—0.3	104	48	1.23	0.78	3.50	0	8	15	11	5
1896	74.6	—1.0	108	41	4.27	0.20	1.80	0	6	17	10	4
1897	74.1	—1.5	108	41	[illegible]	1.06	5.00	0	6	19	9	3
1898	75.8	0.2	[illegible]	44	3.03	—0.42	4.75	0	5	17	9	1
1899	78.8	+3.2	107	49	[illegible]	—0.10	1.28	0	7	18	10	3
1900	80.3	4.7	105	52	[illegible]	0.06	2.77	0	6	19	9	3
1901	78.4	+2.8	110	47	1.88	1.5	3.33	0	5	19	9	3
1902	75.0	0.6	103	47	[illegible]	+2.71	7.81	0	10	14	11	6
1903	74.4	1.2	102	43	5.40	—1.50	6.10	0	10	16	11	4
1904	73.7	1.9	100	43	6.16	2.01	1.43	0	8	16	10	5
1905	76.4	0.8	102	48	4.69	1.14	3.94	0	8	19	7	5
1906	76.6	+1.0	101	[illegible]	4.72	.27	3.55	0	11	14	10	7
1907	77.3	1.7	103	47	3.71	+0.26	6.30	0	9	14	8	6
1908	76.4	0.8	102	46	3.87	+0.2	[illegible]		8	17	9	5
1909	79.5	3.9	110	40	0.55	—2.90	4.21	0	2	21	6	1
1910	74.7	—0.9	105	40	2.77	—0.68	3.80	0	6	15	9	7
1911	75.4	—0.2	109	41	4.50	0.55	5.17	0	7	15	8	8
1912	76.2	+0.6	104	41	4.19	.71	2.62	0	9	17	8	6
1913	82.5	+6.9	110	41	1.06	—2.51	3.51	0	3	22	7	2
1914	77.4	+1.8	106	49	4.25	0.60	3.50	0	9	15	9	7
1915	[illegible]	—6.5	98	37	7.86	+4.15	8.20	0	12	12	9	10
1916	[illegible]	+2.9	107	41	4.05	0.49	6.48	0	7	19	7	5
1917	[illegible]	—2.9	104	38	4.35	+0.14	5.20	0	9	16	8	7
1918	81.8	+5.8	111	45	3.34	—0.27	3.42	0	8	17	9	5

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	....	......	.	0	..	..	..	..		Wm. R. Bennett.
Boonville	11	4.05	+0.49	1.85	0	8	19	1	11	sw.	C. [illegible]decker.
C. Girardeau	11	.		..	0	.	..	..	..	.....	P. L. Albert.
Hermann	14	1.92	—1.29	0.77	0	9	11	12	8	s.	E. F. [illegible].
New Madrid	24	3.81	+0.06	1.20	0	8	17	3	11	se.	Miss Josie Smith.
Osceola	18	1.97	—0.81	0.67	0	5	21	0	10	...	Wm. F. Mathews.
Pacific	1	5.52	.	2.81	0	7	11	10	10	..	Mark Yates.
Steelville	16	3.05	+0.20	0.80	0	9	25	0	6	nw.	F. Kleameyer.
Tuscumbia	1	3.65	....	1.25	0	10	18	10	3	s.	C. B. Wright.
Union	1	7.56	....	2.86	0	8	14	7	10	sw.	J. Wm. Keller.
Valley Park	1	7.31	....	1.60	0	7	17	9	5	....	Geo. W. Barbour.
Waverly	3	2.18	....	0.81	0	11	5	10	6	sw.	J. W. Cauthorn.

Climatological data for August, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, degrees Fahr.							Precipitation, in inches.					Number of days.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Snow, sleet, total.	Days with 0.01 or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	
Northeast Plain.																				
Brunswick	Chariton	640	35	82.2	5.8	106	1	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	15	[illegible]	Louis [illegible]
Clifton Hill	Randolph	731		[illegible]	6.7	110	1	[illegible]	1	[illegible]	[illegible]	[illegible]	1.7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Columbia	Boone	784	[illegible]	81.7	7.0	[illegible]	1	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]		U. S. Weather Bureau
Fayette	Howard	[illegible]	[illegible]	[illegible]	8.9	110	1	[illegible]	31	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					Prof. [illegible]
Fulton	Callaway	818	[illegible]	82.5	[illegible]	107	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Dr. O. M. [illegible]
Gorin	Scotland	730	8								[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	J. V. [illegible]
Hannibal	Marion	[illegible]	21	81.6	6.6	108	4	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	7	[illegible]	U. S. Weather Bureau.
Jefferson City	Cole	657	31	[illegible]	5.9	108	1	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	s.	Miss [illegible]
Keytesville	Chariton	660	1								[illegible]		1.[illegible]	0	[illegible]					J. T. [illegible], M. D.
Kirksville	Adair	969	[illegible]	[illegible]	6.2	106	1	49	31	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	11	1	s.	Prof. [illegible] Burrows.
Louisiana	Pike	[illegible]	39	80.7	6.0	105	5	[illegible]	1	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	e.	J. T. [illegible]
Macon	Macon	[illegible]	19	80.2	[illegible]	107	1	[illegible]	31	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	4	sw.	Chas. N. [illegible]
Mexico††	Audrain	[illegible]	39	[illegible]	5.9	109	6	[illegible]	1	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	[illegible]	1	s.	Mrs. Abbie Snoddy.
Oakfield‡‡	Franklin	793	36	[illegible]	6.[illegible]	110	1	[illegible]	1	36	[illegible]	[illegible]	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	s.	J. J. [illegible]
Palmyra	Marion	652	[illegible]	82.0	[illegible]	110	3	[illegible]	[illegible]	[illegible]	1.28	[illegible]	[illegible]	0	7	2	12	7	sw.	W. B. Markell.
St. Catherine	Linn	[illegible]	1	80.4		106	1	[illegible]	31	32	[illegible]		1.[illegible]	0	7	[illegible]	[illegible]	1	sw.	L. D. Baker.
St. Charles	St. Charles	456	[illegible]	82.0	5.5	[illegible]	1	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	14	[illegible]	1	s.	L. C. [illegible]
St. Louis (1)	St. Louis City	717	16	82.6	[illegible]	[illegible]	1	62	31	[illegible]	[illegible]	[illegible]	[illegible]	0	12	3	[illegible]	4	s.	U. S. Weather Bureau
St. Louis (2)	do.	578	5	82.[illegible]		106	1[illegible]	61	31	26	6.[illegible]		[illegible]	0	[illegible]	12	[illegible]	3	s.	St. Louis University.
Shelbina	Shelby	779	25								2.62	[illegible]	1.23	0	3					S. G. Parsons.
Steffenville	Lewis	650	21	81.4	+7.9	111	1	[illegible]	31	44	[illegible]	[illegible]	1.[illegible]	0	6	12	16	3	sw.	Frank Hall.
Unionville	Putnam	1,072	21	79.3	4.0	108	[illegible]	[illegible]	30	[illegible]	2.9[illegible]	[illegible]	1.2[illegible]	0	[illegible]	[illegible]	8	5	s.	Geo. W. Davis.
Warrenton	Warren	865	26	81.8	[illegible]	[illegible]	[illegible]	[illegible]	1	37	[illegible]	0.61	[illegible]	0	10	[illegible]	[illegible]	5	s.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	571	46	80.7	6.2	108	1	[illegible]	31	32	3.21	[illegible]	1.0[illegible]	0	11	[illegible]	16	1	s.	U. S. Weather Bureau
Section means and extremes				81.9	+6.2	111	1	49	31	50	[illegible]	[illegible]	3.42	0	9	[illegible]	12	5	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	86.1	7.0	111	11	62	2	41	1.87	1.47	1.90	[illegible]	[illegible]	23	[illegible]	2	s.	H. E. Averill.
Doniphan	Ripley	344	12	82.2	5.1	109	1	63	1	[illegible]	1.90	0.57	1.7[illegible]	0	8	21	[illegible]	4	sw.	W. W. Martin.
Jackson	Cape Girardeau	458	26	81.0	5.0	107	3	45	2	53	2.82	[illegible]	[illegible]	0	8	[illegible]	16	[illegible]	s.	L. M. Bean.
Marble Hill	Bollinger	420	25	82.5	+5.8	106	1	51	1	45	1.15	0.80	[illegible]	0	8	[illegible]	[illegible]	9	s.	W. A. Kinder.
Patton (near)	Bollinger	500	2								1.0[illegible]		[illegible]	0	[illegible]					George F. Ellis.
Poplar Bluff	Butler	339	13	80.8	+2.7	108	5	45	1	27	1.8[illegible]	2.23	[illegible]	0	8		1	1[illegible]		Miss Belle [illegible]
Cairo, Ill	Alexander, Ill	359	41	81.6	+4.6	102	3	61	1	29	1.62	1.31	0.7[illegible]	0	7	[illegible]	1	[illegible]	s.	U. S. Weather Bureau
Section means and extremes				82.4	+5.0	111	11	45	1†	53	3.16	[illegible]	1.9[illegible]	0	7	16	[illegible]	6	s.	
Ozark Plateau.																				
Arcadia	Iron	925	39	79.4	+4.9	107	3	47	1	44	5.15	1.55	1.20	0	12	15	11	5	se.	Arcadia College.
Birchtree	Shannon	1,078	23	80.4ᶜ	+4.5	107	4	54	1	39	3.87	0.50	[illegible]	0	4	24	5	2	s.	V. H. Kirkendall.
Bolivar	Polk	1,071	29	81.4	4.3	102	3†	53	31	38	2.78	0.99	0.87	0	8	17	8	6	sw.	K. H. Brown.
Cassville	Barry	1,560	6	80.6	....	105	3†	55	1	41	2.63	1.10	0.85	0	5	20	[illegible]	11	s.	William Talbert.
Crocker††	Pulaski	1,126	6																	Roy W. Reed.
Dean‡‡	McDonald	1,000	18	80.4ᵃ	+2.9	106	1	53	1	45	3.40	0.63	[illegible]	0	11	[illegible]	3	[illegible]	w.	H. E. Dean.
Eldon	Miller	934	16	80.4	+3.9	106	4	53	31	38	2.[illegible]5	−1.03	1.10	0	8	8	2		s.	E. H. Shepherd.
Farmington	Reynolds	918	3	81.4		105	5	60	31	30	6.03		1.[illegible]2	0	10	11	15	2	sw.	Robert Forsyth.
Gano‡‡	Dent	1,250	13	80.2	+3.8	106	4	57	31	33	1.82	0.96	1.62	0	8	20	9	2	s.	A. C. Leach.
Goodland	Iron	1,000	12	78.0	+3.5	108	3†	46	1	49	6.6[illegible]	−2.92	1.71	0	9	12	16	3	s.	F. M. Adams.
Hollister	Taney	735	8	83.0	+5.3	110	11	62	3	46	1.89	+1.01	1.10	0	10	18	[illegible]	12	sw.	W. P. Chapmann.
Houston	Texas	1,280	24	80.2	+3.1	101	4	54	1	35	2.71	−1.02	0.80	0	6	21	7	3	se.	R. F. Harmon.
Koshkonong††	Oregon	958	16	81.9	4.3	106	11	57	1	37	4.70	+0.13	1.98	0	8	13	12	6	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	28	79.2	+2.8	101	4ᵃ	54	1	40	5.96	2.71	2.28	0	9	23	3	5	s.	Leonard E. Dickerson.
Lockwood	Dade	1,078	22	81.6	+4.7	103	4	55	31	30	2.93	1.28	1.50	0	6	[illegible]	5	7	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	18	79.0	+4.0	104	4	55	1	40	3.70	−0.64	1.11	0	9	15	8	8	s.	Mo. Fruit Exp. Sta.
Neosho	Newton	1,011	34	81.3	+4.5	104	3ᵃ	55	31	40	2.21	1.90	0.64	0	10	22	5	4	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	81.1	+6.0	106	5†	55	1	32	5.87	1.55	3.02	0	7	17	11	3	w.	Prof. Elmo G. Harris.
Springfield	Greene	1,350	29	80.0	+5.2	101	4	57	31	29	3.12	1.19	1.20	0	9	15	11	5	s.	U. S. Weather Bureau.
Section means and extremes				80.5	+4.2	110	11	46	1	49	4.08	+0.05	3.02	0	8	18	8	5	s.	
Southwest Plain.																				
Amoret	Bates	831	8	84.2	7.9	111	3	50	31	47	1.54	−1.94	0.95	0	4	16	10	5	s.	Darby Fruit Farm.
Appleton City	St. Clair	843	26	84.3	+6.7	107	3ᵃ	56	31	35	1.53	−2.12	0.92	0	7	12	14	5	sw.	W. G. Bigelow.
Clinton	Henry	765	30	83.2	+6.5	107	3	54	31	41	0.68	−2.52	0.28	0	4	18	11	2	sw.	A. E. Derwent, M. D.
Harrisonville	Cass	912	11	83.7	+8.1	110	3	53	31	45	1.53	−2.58	0.58	0	7	8	2	21	sw.	A. J. Sharp.
Lamar	Barton	980	36	82.8	5.5	109	3	55	31	43	1.99	0.72	1.50	0	8	14	8	9	s.	Joe W. Springer.
Lamonte	Pettis	863	28	83.7ᶜ	+7.2	110	3	53	6	44	3.67	0.23	1.55	0	8	15	13	[illegible]	sw.	J. Ed. Hall.
Marshall	Saline	779	26	83.4ᵃ	+7.9	110	4	57	31	40	2.22	−1.38	0.55	0	10	16	8	7	sw.	Dr. W. H. Black.
Nevada	Vernon	860	23	84.0	+7.2	108	3	53	31	35	2.46	0.91	1.25	0	9	12	16	3	sw.	George A. Kaupp.
Warrensburg	Johnson	883	38																	Geo. H. Collins.
Warsaw	Benton	715	12	82.5	+5.1	109	3†	52	31	47	3.56	−0.42	1.04	0	8	14	17	0	s.	J. R. Smith, M. D.
Section means and extremes				83.5	+6.9	111	3	50	31	47	2.46	−1.22	1.55	0	7	14	11	6	sw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	83.4	+6.8	111	4	53	31	44	2.85	−0.68	1.40	0	5	20	10	1	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	83.0	+8.3	109	4	45	31	37	2.87	−1.12	1.15	0	10	16	9	6	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	81.8	+5.9	110	4	50	31	45	2.32	−2.53	1.00	0	6	16	7	8	s.	Dr. J. R. Campbell.
Conception	Nodaway	982	32	82.4	8.3	109	4	52	31	41	4.50	0.83	3.35	0	6	15	14	2	sw.	Fr. Adelhelm Hess.
Gallatin	Daviess	803	17								3.04	−1.62	0.95	0	8	19	7	5	se.	Robert R. Wynne, Jr.
Grant City	Worth	1,134	21	79.8	+4.8	110	4	51	31	39	3.35	0.35	1.47	0	7	23	5	3	sw.	W. H. Campbell.
Kansas City	Jackson	963	28	83.8	+8.0	108	3	66	29	36	2.45	2.30	0.77	0	10	19	8	4	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,020	26	82.2	+6.7	107	4	51	31	41	2.41	−1.43	0.82	0	10	20	7	4	sw.	J. F. Sharp.
Lexington	Lafayette	688	35	83.6	+7.8	109	4	51	31	41	1.73	1.48	0.50	0	7	18	0	13	s.	J. W. Keithley.
Liberty	Clay	864	28	85.2ᵏ	+8.6	109	3	51	31	40	1.92	−1.73	0.83	0	5	26	3	2	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	78.8	5.1	110	4	48	31	45	6.50	2.41	2.75	0	8	24	4	3	s.	J. R. Brink.
Oregon	Holt	1,048	61	80.5	5.4	110	1	48	31	43	2.43	1.66	0.84	0	8	19	9	3	s.	Tom Curry.
St. Joseph	Buchanan	967	15	82.6	....	109	3	54	31	40	3.28	0.38	1.07	0	11	23	3	5	s.	U. S. Weather Bureau.
Tarkio	Atchison	976	5	80.0	1.1	107	1	50	31	35	3.70	0.44	0.77	0	8	20	7	4	sw.	John F. Frazier.
Trenton	Grundy	822	22	80.9	5.8	101	1ᵃ	52	31	30	3.75	0.15	1.80	0	11	21	7	3	se.	W. H. Estes.
Section means and extremes				82.0	+6.6	111	1	45	31	45	3.14	−0.79	3.35	0	8	20	7	4	s.	
State means and extremes				81.8	+5.8	111	3†	45	1	53	3.34	−0.27	3.42	0	8	17	9	5	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports
used in determining the section or division means.

Reference letters a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ††Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

May

Aug [illegible] Sept

Daily precipitation for August, 1918.

Stations.	Watersheds.	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
[illegible]	Missouri										1.85	T	.01					.12	T		.25				.33	.01	T				1.19	.23	[illegible]
runswick	Grand									.12	.13	.18													[illegible]					.39	.22	.11	[illegible]
ton Hill	Chariton		.01							1.75	.06									.12				.17					.12		1.17	.05	[illegible]
mbia**	Missouri		T						T	2.22		.19		1.22	.18		.70		T	1.58				1.08	.10				.13	.03	.20		[illegible]
yette	do										.81									.25					.15		.11	T		.90	.15		[illegible]
ton	do		T.		T.				T	.18	.51	T			.08		.65	.01		.35				.40	.20	T.				.21	.02	.14	[illegible]
[illegible]	Meramec																																
[illegible]	Mississippi									.32		.20					.17		.91					.07							1.14		[illegible]
[illegible]**	do		T.						T	.11	T	.11		.15	.23		.02	.33	.50	T				.91	T		T	T.	.01	1.31	1.39		[illegible]
[illegible]	Missouri		T	T		T.				.12	T	.01			.01	T	T.				.65				.15	.75	.10			.06	T.	.07	[illegible]
son City	do									.30					.55	.15	.10	.80			.07				.20		.05			.05	.03	.20	[illegible]
tesville	Chariton														.34			.15		1.30				.06						.25	.15		[illegible]
ksville	Mississippi									.51	.02	.16			.13				.37					.12					[illegible]		1.26		[illegible]
isiana	do		T.		T					.16	.39	.10		T	.16			.24	.16				.10	.53	.21				T	.18	2.72	.03	[illegible]
on	Chariton									.26	.18	.18			.03		.28	.28	.01	.02	.72										1.00	.71	[illegible]
[illegible]	Mississippi		T																		.40				.25						.30	.20	[illegible]
[illegible]	Meramec		T.						T	.17			.01		.05				.14					.26	3.42	1.29	.01			T	.02	.02	[illegible]
[illegible]	do									.23				.28		.16									.50	2.81	1.27					.04	[illegible]
[illegible]	Mississippi										.33	.04							1.26	.28					.16						.06	1.55	[illegible]
[illegible]	Grand		T.							.18	.61	.20			.02	T				.47				.28							1.08		[illegible]
Charles	Missouri													T	T		.57							1.00	.90	.30							[illegible]
Louis (1)**	Mississippi								.05	.01	T		.10	.16	T	.74			.19	.13	T.			.13	2.71	.67	T	T	.01		.12		[illegible]
Louis (2)	do								[illegible]	.01	.02		T	.62	T.	.67			T	[illegible]	T			.31	3.96	.67	T		.01		.16		[illegible]
[illegible]	do									.31										.67										.10	1.24		[illegible]
sville	do	T.								.30	T	T			T		.65	.25	.30					.15					T.	T	1.55		[illegible]
[illegible]	Meramec									.24					.01		.07				.76				1.60	2.86	1.96					.06	[illegible]
[illegible]	Grand		T							T	T	1.10	.10		T	.30		.20	.40	.42				.21						T	.10	.15	[illegible]
ley Park	Meramec									.15					[illegible]		.10								.45	1.00	.18					.45	[illegible]
[illegible]	Mississippi			T						.06		T		.11	.46		.32				T				.50	.83	.01	T		.06	.01	.02	2.18
kuk Iowa***	do									.13	.26	.60		.69	T	T	.02	.02	1.03					.05					.01	.01	.42		[illegible]
Southeast Lowlands.																																	
ape Girardeau	Mississippi																																
uthersville	do								.05						T					.55						1.68	1.90	.13			T	.58	[illegible]
iphan	Black							T.						T.	T	T	.22		1.75	.22	T				.16	.58	[illegible]		1.00		.35		[illegible]
son	Mississippi								.65	.24										.37	.12					1.06	.28		.23		.03		[illegible]
rble Hill	do								.40	.15										.96	.20				.30	.70	.70				.70		[illegible]
Madrid	do															1.04	.01				.52					.52	1.26	.14	.01			.57	[illegible]
ton (near)	do								.15	[illegible]				.10											.25	1.20				.75			[illegible]
plar Bluff	Black								.10	.09	T.					.13	T.	.01			.12	T.				.38	.86			T		.11	[illegible]
iro, Ill.**	Mississippi				T				.23	.22					T				.02	T.		.20			T.	.72	.15		T.		.08		[illegible]
Ozark Plateau.																																	
adia	Gasconade					T			.50	.01	.27				.09	.36	.87		.14	.46	.16	T				.74	1.20					.35	[illegible]
ington	Black																																
tree	Osage								.60																.97	1.55						.75	[illegible]
avar	White									.87						.05	T		.28						.70	.07				.03	.70	[illegible]	[illegible]
sville	Gasconade														.65									T	.35		T.			.19	.59	.85	[illegible]
eker	Neosho																																
[illegible]	Osage							.39	.29					.55	.01	.05	T			T.				.14	.14	.17				.20	.82	[illegible]	[illegible]
lton	Black								.75					.05	.20		.27								1.10					.31	.10	[illegible]	[illegible]
mmington	Meramec								1.62	.35	T			.37	.63	.16					.66				.81	.85	.68	T	T.			1.10	[illegible]
[illegible]	Black								.11	.79				T.	.37					1.53				.30	1.32	.25						.15	[illegible]
odland	White								1.59	.11	.06					.25	1.13		.55						.96	1.71	.27						[illegible]
ollister	Gasconade													.50			.44	1.10	.20				.10			.36	.38	.42		.52	.57		[illegible]
nston	Mississippi								T	.15									.55					T.	.35	.55	.31	T				.80	[illegible]
konong	Black		T.						.25					T					.38	.63	.02				[illegible]	1.98	.17					.65	[illegible]
banon	Osage			T.							.03	.78	.17		.25	1.45	.03								2.28	.55						[illegible]	[illegible]
ckwood	do									.34					.46									.08		1.52	.13				T	.40	[illegible]
untain Grove	White							T.	.06		.12						.06	.08		1.41					.28	.42	.15	T				.82	[illegible]
sho	Neosho							T.	T.	.23				T	.09	.17	T	.05		.03					.55	.11		T.		.02	.28	.64	[illegible]
lla	Meramec			T.					T	.28	T						1.10				.02				.76	3.02	.18				T.	.21	[illegible]
ingfield**	White		T.	T					.63	.01				T	.19	.14	.05		T					.17	.08	T				.11	1.14		[illegible]
elville	Meramec									.25	.70				.08	.10	.93								.44	.80	.25					.12	[illegible]
scumbia ‡	Osage								.08	1.19					1.25	.09	.29								.49	.02	.02				.08	.11	[illegible]
Southwest Plain.																																	
otet	Osage														T.	.22		T		.02				T	.05					T.	T.	.35	[illegible]
pleton City	do		.02						.92	.09				T.		.05				T				T	.18					T	.13	.14	[illegible]
ton	do																							.28						.10	.15	.15	[illegible]
arrisonville ‡	do									T.	.15				T.		.20	T.			.05				.25					.05	.25	.58	[illegible]
mar	Neosho								T	1.13					.52	.06	.07								1.19	1.50					.16	.36	[illegible]
monte	Missouri		T.						T	1.55							.24	.40		T.				1.05	.10				T	.18	.05	.10	[illegible]
rshall	do		T.						T.	.35	.55		T.		.02		.27	.20		.05				.31	.18		T.	T.	T.	.24		.05	[illegible]
evada	Osage								.32	.14					.01	.21	.05		.15					.30	1.25	T.				T	.02		[illegible]
ceola	do									.67															.07	.18					.10	.35	1.97
arrensburg	Missouri																																
arsaw	Osage							.15	.80	.75	T.					T								1.01	.22	T				.20	.18	.22	[illegible]
averly ‡	Missouri		T.							.84	.32		T.			T.	T	.06	.11	.14	.03			.22	.12				.07	.08		.22	[illegible]
Northwest Plateau.																																	
valon	Grand									.42				.15						.28				.60							1.40		[illegible]
bany	do		T						.09	.15	.10	.17				.05			.15	.33				1.15					.05		.63		2.87
illicothe	do									.07	.25					.20				.60	.20											1.00	[illegible]
nception	Missouri								T	.13	.08	.31			T.	T			T.	3.35				.29					T		.34		[illegible]
llatin	Grand		.03						.06	.54		.40				.55				.49				.02					T		.95		[illegible]
ant City	do		.07						T.	T	.64	.41	T.	T.	T.	T.			.05	1.47				.20				T			.51		[illegible]
nsas City***	Missouri		T.						.11	.66		.01		.12	.24	.05	.63		T.	.26			T.	T.	T.				T	.06	.31		[illegible]
lden	Grand		.15							.25	.27	.08			.02	.30				.40	.10										.02	.82	[illegible]
xington	Missouri		.10							.38	.12									.42	.05				T					.18		.50	1.73
erty	do									.83		T.			.14	.16													.15	.64			[illegible]
ryville	do		T.								.90	.85			1.38	T.	.02			2.75	.04			.17					T.			.39	[illegible]
egon	do								.06	.44		.16			.02				.07	.06				.84					T.		.78		[illegible]
Joseph***	do		T.					T	.08	.84	.01	.02		T.	.33	.19	.01	T	.14	T.	T.		.51	.12					T.		1.07		[illegible]
rkio	do										.74	.18			.35			.14		.77			.48						.01		.73		[illegible]
enton	Grand		T.					.02	.03	.26	.82				.31		.04		.08	.12				.04					T	.23	1.80		[illegible]

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at th
me of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inc
Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
ates of fall not recorded.

Daily temperatures for August, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	93	100	101	106	105	101	98	92	90	99	103	104	99	93	95	101	91	[illegible]	[illegible]	[illegible]	92	96	[illegible]	[illegible]	91	92	94	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	62	68	68	80	80	84	73	79	70	74	76	77	71	71	73	74	[illegible]	[illegible]	[illegible]	[illegible]	71	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	91	101	102	108	106	102	106	[illegible]	97	101	101	102	98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	72	[illegible]	81	[illegible]	[illegible]	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	69	72	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	98	104	107	110	108	106	103	96	[illegible]	100	[illegible]	105	102	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	77	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	91	100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	102	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	[illegible]	100	[illegible]	108	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	[illegible]	[illegible]	96	103	105	104	102	96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	103	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	95	[illegible]	101	108	[illegible]	[illegible]	[illegible]	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	108	107	108	102	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	69	[illegible]	[illegible]	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	101	98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	70	81	[illegible]	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum	87	96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	66	71	78	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	Maximum	86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	64	71	68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	70	66	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	[illegible]	95	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	60	67	[illegible]	78	76	70	71	70	[illegible]	77	76	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	70	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																																
Caruthersville	Maximum	100	103	[illegible]	104	107	104	[illegible]	104	107	[illegible]	[illegible]	[illegible]	105	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	99	102	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	62	[illegible]	[illegible]	77	[illegible]	[illegible]	76	76	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	103	[illegible]	107	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	57	70	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	71	72	[illegible]	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jackson	Maximum	97	98	107	102	[illegible]	102	96	88	[illegible]	[illegible]	105	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	60	[illegible]	[illegible]	[illegible]	77	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	96	[illegible]	[illegible]	106	[illegible]	101	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Poplar Bluff	Maximum	81	[illegible]	92	106	108	99	98	91	92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	81	90	91	91	[illegible]	87	[illegible]	92	[illegible]	[illegible]	[illegible]
	Minimum	45	57	68	69	77	71	70	70	[illegible]	70	70	72	[illegible]	71	65	68	[illegible]	[illegible]	[illegible]	[illegible]	70	67	63	[illegible]	[illegible]	65	[illegible]	[illegible]	67	[illegible]	[illegible]
Ozark Plateau.																																
Arcadia §§	Maximum	[illegible]	[illegible]	107	[illegible]	[illegible]	[illegible]	[illegible]	91	98	[illegible]	102	97	[illegible]	[illegible]	93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	87	[illegible]	81	76	[illegible]	87	[illegible]	[illegible]	82	[illegible]
	Minimum	47	51	68	74	[illegible]	[illegible]	66	71	[illegible]	67	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	70	[illegible]	[illegible]	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Birchtree	Maximum	[illegible]	94	105	107	[illegible]	100	91	93	91	[illegible]	104	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	[illegible]	[illegible]	[illegible]	72	72	[illegible]	[illegible]	69	68	70	71	[illegible]	63	69	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cassville	Maximum	95	100	105	[illegible]	[illegible]	100	89	98	100	103	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	[illegible]	67	[illegible]	[illegible]	[illegible]	66	69	67	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	75	74	[illegible]	68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Eldon	Maximum	82	[illegible]	[illegible]	106	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	102	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	70	[illegible]	[illegible]	[illegible]	68	72	67	[illegible]	72	[illegible]	67	69	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	69	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Farmington	Maximum	92	95	102	103	105	[illegible]	[illegible]	[illegible]	[illegible]	100	[illegible]	99	91	91	[illegible]	[illegible]	[illegible]	87	[illegible]	[illegible]	92	92	[illegible]	81	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	64	71	72	[illegible]	81	79	[illegible]	72	70	[illegible]	74	[illegible]	71	[illegible]	72	70	70	69	[illegible]	70	71	[illegible]	67	70	70	64	[illegible]	[illegible]	[illegible]	71	[illegible]
Gano	Maximum	91	[illegible]	104	[illegible]	104	101	[illegible]	91	94	100	[illegible]	[illegible]	[illegible]	98	97	[illegible]	[illegible]	91	[illegible]	[illegible]	87	89	90	78	72	87	[illegible]	[illegible]	[illegible]	85	77
	Minimum	58	61	71	78	77	72	70	[illegible]	[illegible]	[illegible]	[illegible]	71	69	69	69	67	67	65	[illegible]	[illegible]	68	67	67	[illegible]	[illegible]	64	[illegible]	[illegible]	71	[illegible]	[illegible]
Hollister	Maximum	98	[illegible]	108	[illegible]	108	106	92	102	[illegible]	109	110	[illegible]	[illegible]	[illegible]	97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	97	[illegible]	95	92	[illegible]	92	[illegible]	92	[illegible]	[illegible]
	Minimum	68	64	62	[illegible]	70	72	76	72	70	72	76	[illegible]	74	72	[illegible]	72	74	[illegible]	70	[illegible]	[illegible]	66	[illegible]	67	65	67	[illegible]	[illegible]	67	[illegible]	[illegible]
Koshkonong	Maximum	91	89	105	105	104	100	91	95	[illegible]	[illegible]	106	100	[illegible]	97	[illegible]	[illegible]	102	100	[illegible]	[illegible]	[illegible]	89	91	87	85	[illegible]	[illegible]	91	94	[illegible]	[illegible]
	Minimum	57	62	71	76	76	72	71	[illegible]	[illegible]	72	72	70	70	70	[illegible]	70	70	71	[illegible]	[illegible]	71	[illegible]	[illegible]	70	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lebanon §§	Maximum	93	97	104	104	104	101	92	[illegible]	[illegible]	95	100	[illegible]	[illegible]	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	89	90	74	74	[illegible]	87	89	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	54	57	68	70	76	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	68	68	[illegible]	[illegible]	68	68	68	68	68	63	62	[illegible]	[illegible]	[illegible]	[illegible]
Mountain Grove §§	Maximum	91	96	102	[illegible]	[illegible]	[illegible]	88	91	[illegible]	105	96	92	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	86	88	87	87	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	60	62	72	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	70	72	69	70	68	67	[illegible]	[illegible]	[illegible]	[illegible]	67	65	67	66	68	56	58	[illegible]	[illegible]	[illegible]	58
Neosho	Maximum	96	100	104	104	[illegible]	101	[illegible]	98	97	[illegible]	102	103	97	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	94	94	90	[illegible]	81	[illegible]	[illegible]	94	[illegible]	[illegible]	[illegible]
	Minimum	56	65	71	71	64	69	67	[illegible]	70	76	73	[illegible]	70	69	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	65	66	69	[illegible]	[illegible]	59	[illegible]	[illegible]	[illegible]	61	55
Rolla	Maximum	87	94	[illegible]	104	106	106	102	[illegible]	98	96	103	[illegible]	101	[illegible]	[illegible]	96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	90	91	92	74	[illegible]	92	[illegible]	[illegible]	93	[illegible]
	Minimum	55	67	68	72	71	[illegible]	73	71	70	69	71	[illegible]	71	69	69	67	67	68	70	[illegible]	67	67	68	69	68	65	65	[illegible]	69	69	[illegible]
Springfield	Maximum	92	96	[illegible]	104	[illegible]	[illegible]	85	91	[illegible]	98	100	95	92	87	91	91	92	[illegible]	89	[illegible]	85	86	84	76	77	87	92	[illegible]	91	82	[illegible]
	Minimum	64	69	[illegible]	80	78	75	69	65	73	76	76	76	72	65	62	70	70	71	70	70	69	68	71	70	69	64	68	71	[illegible]	61	57
Southwest Plain.																																
Amoret	Maximum	90	105	111	110	106	104	102	100	100	106	108	106	100	98	101	103	102	103	98	[illegible]	98	98	95	84	90	100	102	100	98	90	84
	Minimum	57	59	68	82	78	76	71	71	70	72	82	76	70	73	70	67	68	67	68	67	68	68	70	67	64	63	65	67	[illegible]	[illegible]	[illegible]
Appleton City	Maximum	96	103	107	107	104	99	95	95	96	101	102	100	95	93	[illegible]	101	99	99	90	98	95	95	94	81	89	97	99	97	96	87	82
	Minimum	69	69	71	81	78	79	76	64	72	80	71	80	75	78	72	69	72	[illegible]	[illegible]	81	73	73	76	72	66	65	67	[illegible]	68	67	[illegible]
Clinton	Maximum	[illegible]	102	107	106	105	100	97	96	98	103	105	103	96	96	99	103	94	97	91	98	97	97	94	81	90	98	101	98	98	86	84
	Minimum	68	66	66	68	75	73	70	70	71	74	76	70	74	71	71	68	70	70	71	69	69	70	71	71	66	64	69	63	61	65	54
Harrisonville §§	Maximum	103	103	110	[illegible]	108	102	97	93	[illegible]	107	107	105	101	98	102	[illegible]	99	97	90	98	96	99	87	79	90	98	102	98	100	82	[illegible]
	Minimum	58	61	70	71	78	78	72	72	71	70	77	74	75	74	73	69	70	73	72	70	70	70	70	67	65	65	64	64	65	65	53
Lamar §§	Maximum	98	[illegible]	109	107	106	101	[illegible]	102	97	102	101	101	99	92	98	102	102	100	94	75	95	96	90	78	85	94	97	97	95	92	82
	Minimum	60	66	66	77	72	[illegible]	71	71	69	76	72	72	73	71	71	69	70	68	72	68	68	68	69	69	68	62	65	66	65	66	57
Lamonte	Maximum	97	101	110	[illegible]	106	102	100	91	96	101	101	102	98	95	100	[illegible]	[illegible]	88	[illegible]	[illegible]	95	96	85	79	88	96	98	96	...	...	...
	Minimum	63	71	75	81	79	79	72	70	70	71	75	75	76	73	[illegible]	72	73	70	65	67	70	70	70	69	62	62	62	65	...	...	...
Marshall	Maximum	97	103	[illegible]	110	107	104	102	97	95	101	103	103	102	95	102	104	97	[illegible]	85	95	94	95	89	81	90	97	..	101	97	87	83
	Minimum	65	70	67	79	76	79	71	71	70	69	73	75	76	71	76	69	73	71	69	69	68	69	70	69	63	65	..	65	64	64	57
Warrensburg	Maximum			.				.	..	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Minimum	..							..	...		..	.	..	.	..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Warsaw	Maximum	95	100	109	109	105	101	96	95	95	100	102	101	98	92	100	100	100	95	92	91	94	95	97	86	88	96	99	97	98	85	82
	Minimum	51	63	62	80	72	75	67	70	70	70	71	73	75	72	67	70	67	75	72	70	69	70	76	70	65	62	62	65	67	64	52
Northwest Plateau.																																
Chillicothe §§	Maximum	98	100	104	110	108	102	102	90	94	103	101	101	100	91	97	105	95	92	81	94	95	97	85	89	91	99	99	96	91	84	83
	Minimum	59	66	61	65	63	80	71	72	67	68	73	74	76	67	70	70	71	73	67	67	71	72	69	57	58	64	65	68	61	61	50
Grant City	Maximum	98	95	98	110	106	102	100	90	90	99	97	100	97	[illegible]	95	104	99	82	80	90	90	96	83	87	92	90	96	86	86	81	83
	Minimum	59	70	63	71	[illegible]	75	70	72	66	67	70	69	69	66	68	68	69	68	66	68	70	70	65	60	63	63	63	68	[illegible]	[illegible]	[illegible]
Kansas City	Maximum	97	99	108	106	105	101	96	[illegible]	91	102	101	100	95	95	96	99	98	88	87	93	94	95	81	83	90	96	97	94	95	80	82
	Minimum	68	76	[illegible]	85	85	83	77	71	68	79	81	81	76	73	72	69	76	71	70	[illegible]	73	74	72	70	68	70	70	71	66	60	55
Kidder §§	Maximum	96	97	106	107	106	101	101	83	89	98	102	103	94	96	96	101	100	91	80	[illegible]	91	97	80	79	92	96	98	93	91	85	80
	Minimum	62	73	[illegible]	81	82	79	78	71	68	73	74	76	75	67	71	71	74	73	68	68	72	71	69	67	65	67	64	71	[illegible]	67	51
Lexington §§	Maximum	[illegible]	101	[illegible]	106	106	[illegible]	100	93	95	102	105	103	100	96	100	103	96	88	[illegible]	95	95	96	85	84	92	97	100	97	91	81	82
	Minimum	78	70	70	81	81	81	75	71	68	[illegible]	75	81	80	73	71	71	[illegible]	71	[illegible]	69	70	71	71	70	60	66	66	68	64	70	53
Marysville §§	Maximum	[illegible]	98	97	110	107	102	99	83	88	[illegible]	98	99	[illegible]	85	[illegible]	90	98	90	80	89	91	91	87	88	90	93	94	84	86	75	70
	Minimum	58	61	64	65	75	79	71	71	63	64	70	70	73	65	65	65	72	69	64	65	67	70	65	59	60	62	61	65	56	56	48
Oregon	Maximum	96	96	[illegible]	110	106	104	98	90	88	[illegible]	97	100	[illegible]	90	93	90	90	89	85	94	95	98	79	86	88	90	93	86	87	85	78
	Minimum	63	71	[illegible]	78	77	78	72	69	65	71	70	71	71	65	68	70	72	64	61	66	72	66	66	61	62	[illegible]	64	72	58	58	48
St. Joseph	Maximum	99	98	[illegible]	107	105	100	99	[illegible]	86	101	102	101	93	91	96	100	100	91	85	93	96	98	80	85	89	94	96	88	92	79	81
	Minimum	66	76	69	83	83	82	77	70	65	75	75	80	76	71	72	74	75	72	69	70	71	71	70	65	63	68	68	70	64	58	51
Trenton	Maximum	96	91	[illegible]	104	104	100	98	96	88	97	96	97	95	92	91	95	93	[illegible]	86	90	90	94	90	85	88	89	91	93	89	[illegible]	77
	Minimum	61	73	65	78	78	80	71	73	68	73	72	75	75	69	69	71	73	70	68	70	71	72	71	67	62	67	67	70	60	62	52

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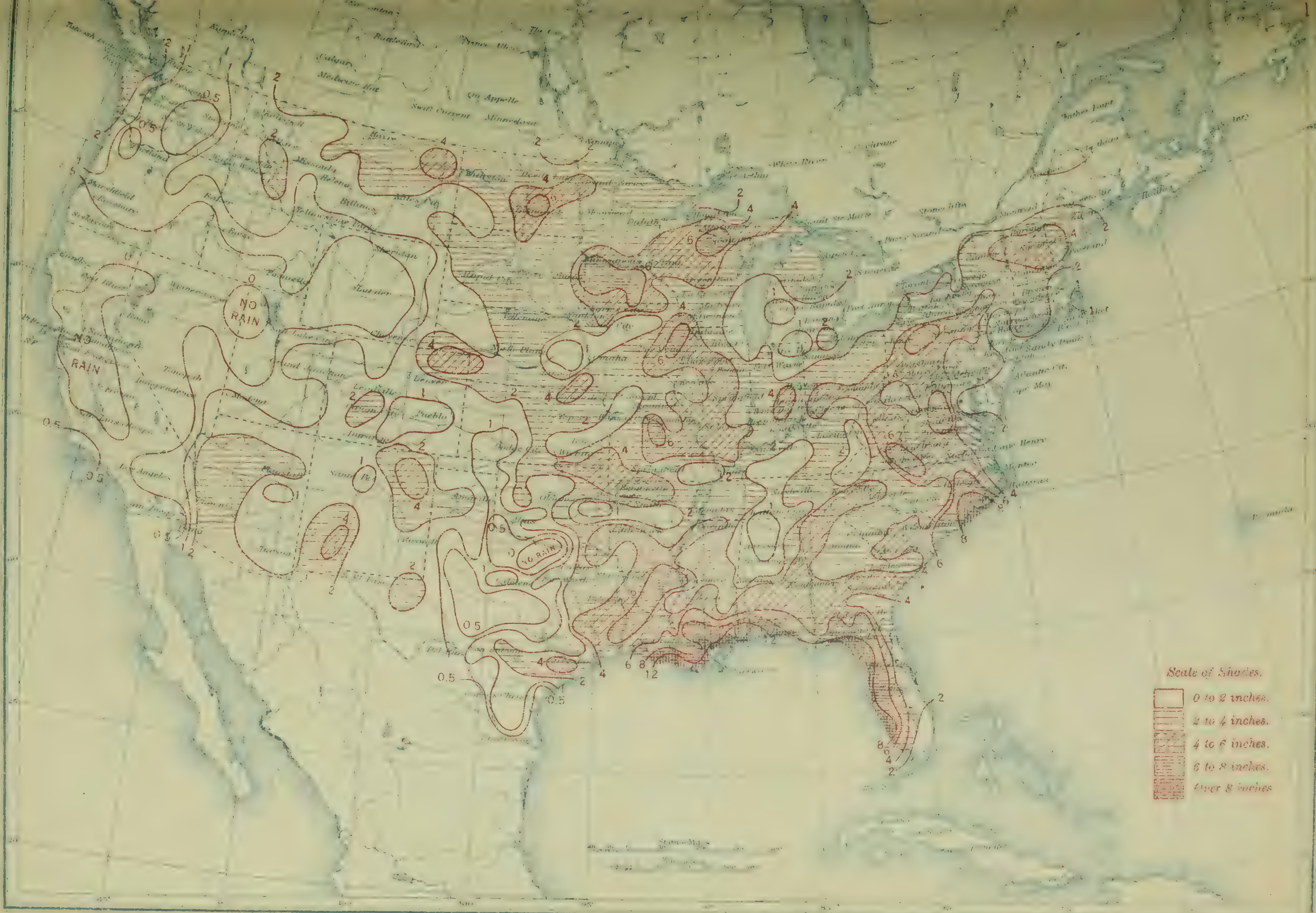
*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches
NO RAIN
NO RAIN
NO RAIN
Calgary
Medicine Hat
Qu' Appelle
Swift Current
Minnedosa
Helena
Billings
Miles City
Sheridan
Rapid City
Duluth
Omaha
Cheyenne
Denver
Pueblo
Grand Junction
Los Angeles
Portland
Tucson
El Paso
Bermuda

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR AUGUST, 1918, AT THE UNIVERSITY OF M SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 61 and 62.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude, 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916. 8 a. m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron: diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standards described in Circular I. Horizontal distance of the anemometer fr pan, 2 inches. Height of cups of anemometer above rim of pan inches. The instrument shelter is 100 feet southeast of the pan; he of thermometers above ground, [illegible] feet. Distance of rain gage from 2.6 feet. The ground in the immediate vicinity of the pan slopes to north, average 5 per cent grade. The soil is covered by blue grass being part of the University campus. There are no bodies of water n nor are there any irrigation projects under way nearby. The gen topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising offi being George Reeder, Meteorologist and Section Director. The obser tions in the table herewith, were taken by Orlin R. Rog Observer, Weather Bureau. This is one of the "Class A" stations signed to furnish practical information relative to evaporation. Full complete climatic records have been made at Columbia, Mo., [illegible] Weather Bureau for about 28 years. These records are published [illegible] are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for August, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Daily evaporation	.145	.275	.294	.342	.417	.458	.412	.344	.262	.240	.261	.268	.321	.297	.244	.144	.196	.219	.172	.176	.149	.192	.220	.134	.069	.141	.203	.314	.097	.183	.091
Daily wind movement	25	23	31	32	40	47	39	41	38	29	28	21	29	26	18	18	18	12	47	16	18	22	33	28	12	24	20	22	29	28	33

*Total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian summer time.

OBSERVERS' REMARKS.

Fayette: Very hot and dry. Much corn burned up. Grasshoppers bad in places.

Gorin: There was a high wind on the 30th, which lodged corn to some extent. No other damage.

Kirksville: The hot winds on the 4th, also on the 6th and 7th did great damage to corn.

St. Catherine: Hot winds on the 4th, also on the 6th and 7th did more damage to corn than drought did in a month.

Warrenton: A hot and dry month. Upland corn dried up; also pastures. The late rains are of some benefit.

Birchtree: Extreme heat of the 3d to 6th, accompanied by hot wind, was the worst ever hnown here.

Bolivar: A destructive hailstorm occurred west of this station on the 30th. It covered a large area, and damaged corn and forage crops; and killed poultry, and broke window panes.

Eldon: The drought was broken by rain on the 8th. Corn said to be ruined by hot winds. Dry leaves blowing off corn and trees.

Houston: We are having a good season since the rains, and late corn is looking good.

Lockwood: A hot, dry month, resulting in great damag crops; corn cut short. Plowing for wheat well advanced.

Rolla: Blasting winds on the 4th, and 5th

Amoret: Hot winds ruined the corn crop, and did consid able damage to apples. Stock water very scarce; pastures go everybody feeding stock now, and shipments are heavy.

Appleton City: Hot and dry. Corn badly damaged by t extreme heat and hot, dry winds; pastures short.

Warsaw: Very hot and dry most of the month. Not a sin cloudy day. Drought caused much loss in corn, pastures, fru and gardens.

Avalon: This has been the hottest month with the hott winds I have ever experienced since I came to Missouri, in 187 Most corn ruined.

Grant City: The past month was hot and dry, but was ge erally favorable for threshing, and plowing; about 70 per ce of fall plowing has been done.

Kidder: High temperatures prevailed both day and nig throughout the month, except two or three nights.

Liberty: A wind and hailstorm occurred during the afte noon of the 29th. The smokestack of the water and light pla was blown down, leaving the city without water and light f the night.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

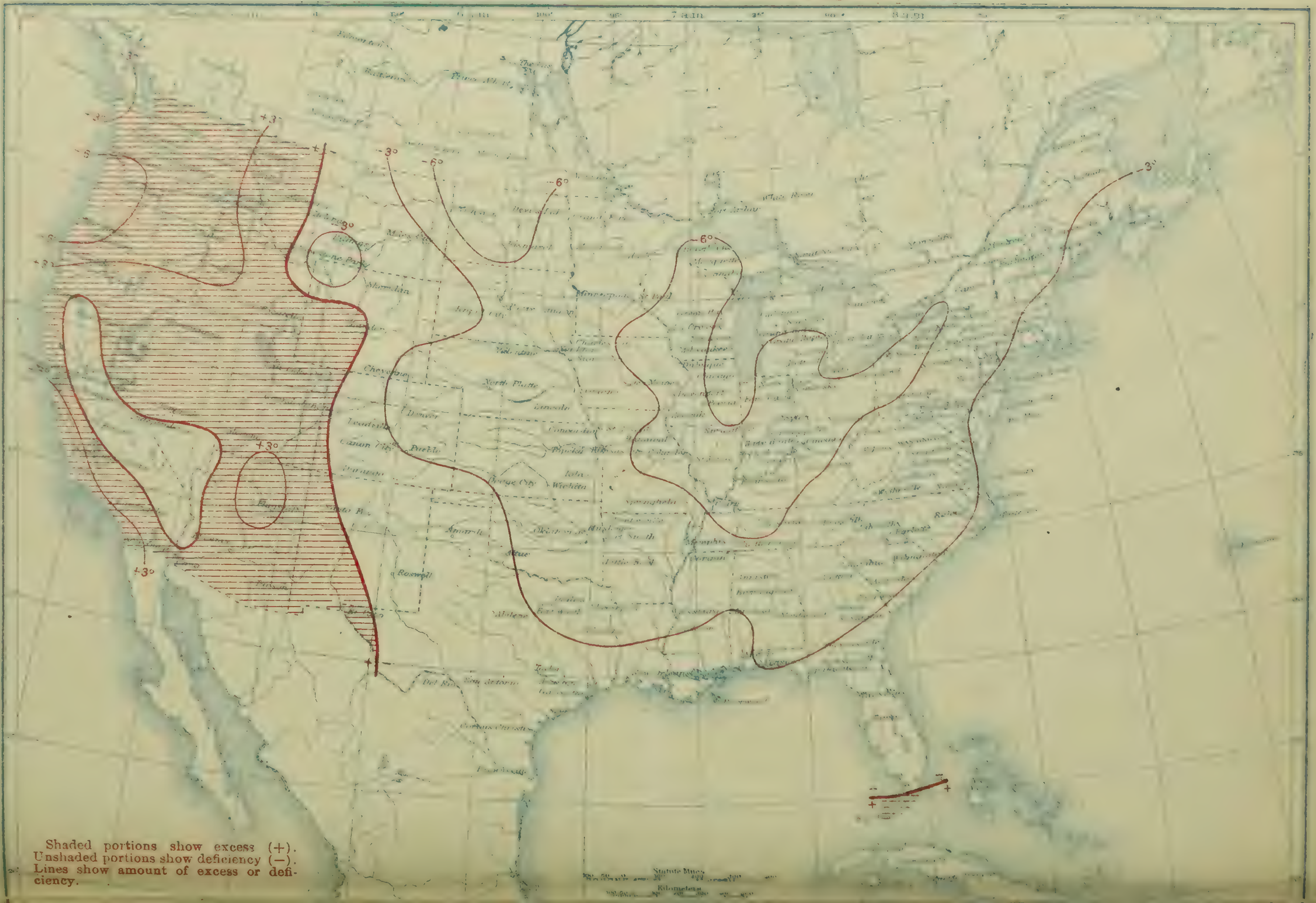
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

SEPTEMBER, 1918

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
OCT. 18, 1918.

Departure of the Mean Temperature from the Normal, September, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXII. COLUMBIA, MO., SEPTEMBER, 1918. No. 9

GENERAL SUMMARY.

September, 1918, in Missouri, was abnormally cool, but was generally favorable for farm work. Although the monthly mean temperature was the lowest in 30 years, a minimum temperature of 32° occurred at only 9 stations and resulting frost damage was slight. There were only four or five days during the month with mean temperature above normal.

The monthly precipitation was sufficient for all needs. Rains were general from the 2d to the 4th; on the 11th, and from the 15th to the 17th; during the last ten days rains fell as local showers.

The preparation of the soil for wheat seeding made excellent progress, being practically completed at the close of the month; much wheat had been sown and was germinating nicely. Pastures, meadows, and truck made improvement.

TEMPERATURE.

The monthly mean temperature for the State, 66 stations reporting, was 62.3°. The departure from the normal for 61 stations having 10 or more years' record was minus 6.7°. This has been the coolest September in 30 years; yet with the exception of 9 stations, there was no serious frost damage with temperature of 32°. Maximum temperatures of 90° or higher occurred at about 40 stations, mostly on the 14th, the warmest day, although the 1st, 12th, and 28th also were warm. The minimum for the month, 29°, at Bethany, is not unusual for September.

PRECIPITATION.

The average precipitation, as determined from the records of [illegible] stations, was 4.73 inches. The departure from the normal for 72 stations having 10 or more years' record was plus 0.77 inch. Although the precipitation for the State as a whole was above normal, less than normal amounts fell in about 20 or more of the northern counties, and in about 10 counties along the top of the Ozark Plateau. The heaviest amounts occurred along the southern side of the Missouri River generally, although Columbia, north of the river, received the greatest amount for the month; amounts also were excessive along the eastern and southern slopes of the Ozarks.

EVAPORATION.

The total evaporation for the month, at Columbia, Mo., was [illegible] inches; the total precipitation was 9.69 inches; the total wind movement over the surface of the pan was 681 miles, and the mean temperature was 61.4°. During the same month in 1917, these data were, in order named, 3.81 inches; 2.38 inches; 869 miles, and 65°.

WIND.

The prevailing winds were from the south. The total number of miles, as determined from 8 stations equipped with anemometers, was 5,726, or an average hourly velocity of about 8 miles. This is about 3 per cent above the normal. Except a local storm in Christian County, there were no damaging winds.

SUNSHINE AND CLOUDINESS.

The average number of hours of sunshine, 6 regular stations with sunshine recorders reporting, was 250, or 67 per cent of the possible and about 2 per cent greater than the normal.

MISCELLANEOUS PHENOMENA.

Fog, dense—3d, 6th, 11th, and 17th.

Frost, light—20th, and 21st. Killing at about 9 stations, 6 along the northern border and 3 in the Ozark Plateau.

Halos, solar—1st, 6th, 14th, 20th, and 27th. Lunar—26th.

Thunderstorms, local—1st, 3d, 5th, 12th, 14th, 16th, 17th, 18th, 24th, and 25th. General—2d, and 15th.

Tornadoes—On the 2d, in Christian County.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean pressure (corrected)	Mean relative humidity, 8 a.m.	Mean relative humidity, 8 p.m.	Sunshine, Total hours	Sunshine, Per cent of possible	Wind, Total movement	Wind, Prevailing direction	Max. velocity, Miles per hour	Max. velocity, Direction	Max. velocity, Date
Columbia	30.0[illegible]	8[illegible]	..	21[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	30.07	81	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kansas City	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Joseph	30.0[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis	[illegible]	7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	sw.	[illegible]
Springfield	30.08	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cairo, Ill	[illegible]	81	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	n.	[illegible]
Keokuk, Iowa	30.09	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature. Mean.	Departure.	Highest.	Lowest.	Precipitation. Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of Days. With .01 inch or more.	Clear.	Partly cloudy.	Cloudy.
1888	65.2	−3.7	[illegible]	[illegible]	1.11	[illegible]	...	0	[illegible]		...	...
1889	61.7	−[illegible]	[illegible]	[illegible]	1.60	[illegible]		[illegible]	[illegible]		..	...
1890	6[illegible]	[illegible]5.2	[illegible]	[illegible]	[illegible]	[illegible]		0	[illegible]		...	...
1891	70.6	1.7	10[illegible]	[illegible]	[illegible]	[illegible]		0	6		.	..
1892	67.8	−1.1	97	[illegible]	[illegible]	1.[illegible]	[illegible]	[illegible]	4	19	6	5
1893	69.9	1.0	10[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	17	7	6
1894	68.5	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	0	5	[illegible]	11	6
1895	71.8	2.[illegible]	10[illegible]	25	2.[illegible]	1.[illegible]	6.21	0	[illegible]	1[illegible]	8	3
1896	65.0	[illegible]3.9	101	28	1.[illegible]	[illegible]	4.[illegible]	0	[illegible]	11	10	[illegible]
1897	74.3	+5.4	[illegible]	27	0.[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	5	2
1898	70.9	[illegible]2.0	[illegible]	30	6.74	3.[illegible]	6.[illegible]	0	9	13	[illegible]	[illegible]
1899	67.4	1.5	10[illegible]	16	2.01	−1.63	.01	0	1	[illegible]	1	1
1900	71.1	+2.2	10[illegible]	29	4.81	+1.14	[illegible]	[illegible]	10	1[illegible]	1[illegible]	7
1901	68.9	0.0	10[illegible]	27	[illegible]	−1.[illegible]	[illegible]	0	6	[illegible]	8	1
1902	63.2	−5.7	[illegible]	[illegible]	4.78	1.11	[illegible]	0	10	1[illegible]	6	9
1903	66.4	−2.5	[illegible]	32	4.[illegible]	0.71	6.[illegible]	0	8	17	[illegible]	7
1904	69.6	0.7	96	[illegible]	[illegible]	0.18	2.[illegible]	0	3	16	8	[illegible]
1905	69.6	[illegible]0.7	98	41	7.67	+4.[illegible]	[illegible]	0	11	15	6	9
1906	71.9	+3.0	98	[illegible]	4.15	0.4[illegible]	4.28	0	[illegible]	15	8	7
1907	68.9	0.0	101	[illegible]	1.93	[illegible]	[illegible]	0	[illegible]	[illegible]	7	5
1908	71.6	+2.7	99	2[illegible]	1.[illegible]	−1.87	2.6[illegible]	0	4	18	8	4
1909	68.7	−0.2	10[illegible]	28	1.[illegible]	0.95	4.[illegible]	0	8	18	6	6
1910	69.5	0.6	[illegible]	31	[illegible]	1.91	4.63	0	10	14	[illegible]	10
1911	73.7	4.6	[illegible]	39	7.13	[illegible]	[illegible]	0	11	1[illegible]	7	10
1912	68.6	−0.3	[illegible]	27	3.06	−0.[illegible]	[illegible]	0	6	17	[illegible]	8
1913	69.1	[illegible]0.5	109	27	1.[illegible]	[illegible].79	[illegible]	0	[illegible]	15	7	10
1914	69.6	[illegible]0.5	99	35	6.27	[illegible]2.02	[illegible].22	0	9	15	8	7
1915	70.6	+1.5	[illegible]	31	[illegible].25	−[illegible]	[illegible].91	0	[illegible]	[illegible]	7	7
1916	67.8	−1.5	10[illegible]	27	2.[illegible]	[illegible]	[illegible]	0	6	19	7	1
1917	67.9	−1.2	101	33	2.78	−[illegible]	[illegible]	0	5	19	6	5
1918	62.3	−6.7	[illegible]	29	4.[illegible]	−0.77	[illegible]	0	[illegible]	17	6	7

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	No. of days. With precip. .01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Arlington	15	3.26	[illegible]0.41	1.25	0	6	..	..	..	..	Wm. R. [illegible]
Boonville	41	5.28	−0.52	2.[illegible]	[illegible]	9	19	1	10	se.	C. Rau[illegible]
C. Girardeau	11	.	....	..	0	..	..	.	.	.	[illegible]
Glencoe	1	5.[illegible]	....	1.32	0	7	18	[illegible]	12	....	L. M. [illegible]
Hermann	41	7.66	+3.64	[illegible]	0	8	13	[illegible]	13	sw.	E. J. [illegible]
New Madrid	24	3.96	[illegible]0.50	[illegible]	0	11	16	[illegible]	11	ne.	Miss Josie [illegible]
Osceola	18	5.66	[illegible]1.83	3.50	0	7	15^{b}	3'	10'	......	Wm. L. Mathews.
Pacific	1	5.75	....	1.39	0	9	7	6	17	......	Mark Wa[illegible]
Steelville	16	5.75	+2.53	1.70	0	8	22	0	8	w.	F. Kr[illegible]
Tuscumbia	1	7.27	....	4.20	0	8	18	0	12	n.	C. B. Wr[illegible]
Union	1	6.48	....	1.[illegible]	0	9	19	3	8	nw.	J. Wm. Keller.
Valley Park	1	5.60	....	1.28	0	7	19	7	4	.....	Geo. W. Barbour.
Waverly	3	5.74	....	1.92	0	8	22	[illegible]	6	sw.	[illegible]

Climatological data for September, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With 0.01 or more precip.	Clear.	Partly cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Northeast Plain.																				
Brunswick	Chariton	650	37	62.3	−3.8	84	13	38	20+	41	4.06	−0.27	2.11	0	5	22	0	8	s.	Louis Benecke.
Clifton Hill	Randolph	751	....	62.3	−5.4	89	3+	35	20	36	1.85	−2.01	0.75	0	4	22	5	3		L. S. Harlan.
Columbia	Boone	784	27	61.1	−6.4	84	1	36	20	40	9.69	+6.84	6.61	0	9	14	10	6	se.	U. S. Weather Bureau
Fayette	Howard	725	32	62.2	−6.2	88	1	37	20	40	4.66	−0.68	2.63	0	5	...	...	...	...	Prof. T. B. Smith.
Fulton	Callaway	818	13	62.6	−6.2	91	12	34	21	45	6.90	+2.65	3.26	0	6	...	...	...	se.	Dr. O. M. Weigle.
Gorin	Scotland	700	28	...	...	...	...	...	...	...	2.48	−1.93	1.04	0	6	9	15	6	sw.	J. W. Pulliam.
Hannibal	Marion	534	24	61.2	−6.7	83	14	38	20	35	5.89	+2.33	2.70	0	10	14	7	9	sw.	U. S. Weather Bureau
Jefferson City	Cole	557	31	......	...	...	...	38	20+	...	5.85	+2.63	1.92	0	8	23	4	3	w.	Miss Emma Swift.
Keytesville	Chariton	660	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	J. T. Dewey, M. D.
Kirksville	Adair	969	25	60.8	−5.2	85	28	31	20	38	2.04	−2.39	0.63	0	7	14	14	2	s.	Prof. Mark Burrows.
Louisiana	Pike	469	39	59.4	8.5	78	8+	33	21	38	5.07	1.23	2.00	0	6	20	5	5	n.	C. T. Farrell
Macon	Macon	875	19	60.8	−7.6	86	14	33	21	42	3.35	−0.73	1.23	0	8	16	4	10	se.	Chas. N. Tolman
Mexico ++	Audrain	797	39	60.5	−8.3	87	1	35	20+	46	5.00	−0.59	1.60	0	7	20	0	10	s.	Mrs. Abbie Snoddy.
Oakfield	Franklin	793	36	62.3	−8.0	84	1+	36	20	38	6.37	−2.53	3.02	0	7	9	15	6	s.	E. E. Stokes.
Palmyra	Marion	652	5	59.9	−8.7	83	11	31	21+	34	4.11	+0.40	1.18	0	8	16	6	8	sw.	W. B. Markell.
St. Catherine	Linn	850	4	61.2	.....	84	13	33	20	41	1.73	......	0.75	0	6	14	14	2	sw.	L. D. Baker.
St. Charles	St. Charles	456	39	61.6	−5.6	86	1	37	21	32	6.68	+3.60	3.18	0	5	14	6	10	n.	L. C. Saeger.
St. Louis (1)	St. Louis City	717	46	63.6	−6.4	82	10	42	20	28	5.09	+2.19	1.97	0	9	15	10	5	s.	U. S. Weather Bureau
St. Louis (2)	do.	578	5	62.8	.....	83	11	41	20+	30	5.67	....	2.34	0	10	13	10	7	n.	St. Louis University.
Shelbina ++	Shelby	779	25	.....	.....	.....	.....	...	...	...	3.48	−0.16	1.30	0	6	...	...	...	...	S. G. Parsons.
Steffenville	Lewis	650	24	64.0	−4.7	91	28	33	20	46	3.37	−0.86	1.25	0	7	15	7	8	sw.	Frank Hall.
Unionville	Putnam	1,072	24	62.0	−5.3	86	1	32	21	40	3.95	−0.72	2.40	0	4	22	3	5	n.	Geo. W. Davis.
Warrenton	Warren	865	26	61.0	−7.8	85	1	36	20	40	5.58	+1.62	1.52	0	9	14	9	7	s.	Prof. J. H. Frick.
Keokuk, Iowa	Lee, Ia.	571	46	61.3	−5.1	83	1	37	20	31	1.77	−2.20	0.60	0	7	15	10	5	s.	U. S. Weather Bureau
Section means and extremes				61.7	−6.4	91	12+	32	21	46	4.60	+0.77	66.1	0	7	16	8	6	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	69.2	−3.9	94	14	44	21	40	6.36	−3.30	1.95	0	6	19	4	7	e.	H. E. Averill.
Doniphan	Ripley	344	12	62.8	−8.5	85	3+	38	22	36	6.79	+3.22	3.10	0	9	18	5	7	ne.	W. W. Martin.
Jackson	Cape Girardeau	458	26	62.8	−7.3	87	28	34	21	50	4.96	+1.35	2.25	0	8	13	9	8	s.	L. M. Bean.
Marble Hill	Bollinger	420	25	65.8	−5.0	95	1+	34	22	43	5.40	+1.74	2.80	0	4	19	1	10	s.	W. A. Kinder
Patton (near)	Bollinger	500	2	...	......	...	...	...	...	...	3.55	....	1.80	0	4	...	...	...	...	George F. Ellis.
Poplar Bluff	Butler	339	13	63.4	−8.5	87	14	38	22	38	6.51	−3.27	1.94	0	8	15	6	9	.....	Miss Belle Kinne.
Cairo, Ill.	Alexander, Ill	359	44	64.1	−6.1	84	14	41	21	26	5.29	+2.82	2.62	0	9	12	4	14	n.	U. S. Weather Bureau
Section means and extremes				64.7	−7.7	95	1+	34	21+	50	5.55	+2.62	3.10	0	7	16	5	9	s.	
Ozark Plateau.																				
Arcadia	Iron	925	39	58.8	−9.0	81	1+	33	21	43	3.95	+0.27	0.86	0	9	18	4	8	s.	Arcadia College.
Birchtree	Shannon	1,078	23	62.4^{f}	−7.5	82	13+	37	19+	35	5.47	+1.91	2.80	0	5	18^{b}	4^{b}	6	n.	V. H. Kirkendall.
Bolivar	Polk	1,071	29	62.4	−7.7	92	14	34	21	41	3.49	+0.78	0.88	0	7	13	4	13	s.	K. H. Brown.
Cassville	Barry	1,500	6	61.6	......	90	3	41	21	33	5.25	+1.16	2.00	0	4	20	0	10	n.	William Talbert.
Crocker ++	Pulaski	1,126	6	...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Roy W. Reed.
Dean	McDonald	1,000	18	62.6^{g}	−8.8	91	14	31	21	39	6.90	+4.38	2.36	0	6	21	4	5	......	H. E. Dean.
Eldon	Miller	934	16	61.2	−8.7	86	1	33	20	40	5.55	+1.86	2.20	0	6	18	9	3	n.	E. H. Shepherd.
Farmington	Reynolds	918	3	61.9	......	86	10	37	21	41	3.95	....	1.73	0	6	16	6	8	ne.	Robert Forsyth.
Gano	Dent	1,250	13	60.8	−9.7	85	13	31	21	41	3.08	−1.35	1.37	0	4	19	3	8	s.	A. C. Leach.
Goodland	Iron	1,000	12	59.0	−8.7	82	11	32	21	44	3.36	−0.55	1.57	0	5	20	5	5	s.	F. M. Adams.
Hollister	Taney	735	8	65.0	−6.8	86	2+	38	23+	36	5.24	+1.64	1.90	0	6	24	0	6	nw.	W. P. Chapmann.
Houston	Texas	1,280	24	61.6	−7.3	82	11+	34	21	39	2.92	−1.24	1.55	0	5	19	2	9	se.	R. F. Harmon.
Koshkonong ++	Oregon	958	16	64.5	−6.7	84	1+	39	21	32	4.71	+1.17	1.75	0	9	17	5	8	sw.	R. M. Hitt.
Lebanon	Laclede	1,265	28	59.6	−10.4	82	2+	34	20+	38	3.34	−0.74	0.78	0	7	22	2	6	s	Leonard E. Dickerson
Lockwood	Dade	1,078	22	66.0	−6.0	91	14	36	21	35	5.12	+1.12	1.31	0	6	21	3	6	se.	C. S. Crow.
Mountain Grove	Wright	1,490	18	60.4	−8.6	83	14	35	21	37	3.39	−0.71	0.32	0	7	17	5	8	sw.	Mo. Fruit Exp. Sta
Neosho	Newton	1,011	34	63.2	−7.5	90	2+	33	21	41	5.25	+1.04	2.08	0	9	20	2	8	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	63.6	−4.2	86	14	36	20	38	3.86	0.0	0.96	0	7	18	8	4	n.	Prof. Elmo G. Harris
Springfield	Greene	1,350	29	62.8	−5.1	89	14	39	20	27	4.82	+1.06	1.54	0	8	14	8	8	se.	U. S. Weather Bureau
Section means and extremes				62.5	−7.7	92	14	31	21	44	4.42	+0.60	2.80	0	6	19	4	7	s.	
Southwest Plain.																				
Amoret	Bates	831	8	63.4	−5.6	93	14	34	20	45	4.27	+0.37	2.13	0	7	17	7	6	s.	Darby Fruit Farm.
Appleton City	St. Clair	853	26	64.2	−6.5	91	14	36	21	41	3.98	+0.47	1.33	0	7	17	9	4	se.	W. G. Bigelow.
Clinton	Henry	765	30	63.6	−6.8	91	14	34	21	46	5.90	+2.27	1.93	0	6	20	8	2	ne.	A. E. Derwent, M. D.
Harrisonville	Cass	912	44	61.6^{a}	−6.9	88	2+	35	21+	44	6.15	+1.73	2.20	0	9	14	0	16	sw.	A. J. Sharp.
Lamar	Barton	980	36	64.0	−6.7	96	14	34	21	45	4.17	−0.11	1.90	0	5	17	6	7	s.	Joe W. Springer
Lamonte	Pettis	863	28	62.2	−8.8	96	1	33	20+	42	4.55	+0.09	2.30	0	6	18	6	6	sw.	J. Ed. Hall.
Marshall	Saline	779	26	62.6^{c}	−5.7	89	1	34	20	46	7.59	+2.68	4.52	0	7	14^{d}	8^{d}	4^{d}	nw.	Dr. W. H. Black
Nevada	Vernon	860	23	61.0	−5.1	92	14	35	21	39	5.73	+1.58	2.97	0	8	16	7	7	s	George A. Kaupp.
Warrensburg	Johnson	883	38	......	......	......	......	......	......	......	......	......	......	...	...	...	...	...	...	Geo. H. Collins.
Warsaw	Benton	715	12	61.8	−8.8	90	14	32	21	49	6.41	+1.14	1.68	0	8	18	11	1	ne.	J. R. Smith, M. D.
Section means and extremes				63.0	−6.8	96	1+	32	21	49	5.42	+1.28	4.52	0	7	17	7	6	s.	
Northwest Plateau.																				
Avalon	Livingston	730	31	62.8	−6.8	90	28	35	20	38	3.80	−1.15	1.60	0	6	23	3	4	sw.	F. G. Ashbaugh
Bethany	Harrison	916	27	62.8	−3.9	86	1+	29	21	50	2.78	−1.00	1.83	0	5	15	9	6	sw.	M. H. Moulton
Chillicothe	Livingston	768	1	61.6	−8.8	88	14+	31	21	50	2.95	−3.53	1.00	0	6	18	3	9	sw.	Dr. J. R. Campbell.
Conception	Nodaway	982	32	62.0	−5.0	87	13	35	20	34	2.85	−0.92	1.82	0	8	10	16	4	ne.	Fr. Adelhelm Hess
Gallatin	Daviess	803	17	......	......	......	......	......	......	...	2.63	−1.50	1.15	0	8	17	8	5	n.	Robert R. Wynne, Jr
Grant City	Worth	1,134	24	61.7	−5.3	87	13	33	21	39	3.82	−0.13	1.78	0	5	25	0	5	s.	W. H. Campbell.
Kansas City	Jackson	963	28	63.8	−3.7	87	13	40	20	31	7.29	+3.53	4.41	0	11	19	5	6	n.	U. S. Weather Bureau
Kidder	Caldwell	1,020	26	62.3	−5.2	86	1+	34	20	35	3.85	−0.18	2.20	0	11	21	4	5	sw.	J. F. Sharp.
Lexington	Lafayette	688	35	63.0	−5.6	86	1+	35	21	38	4.04	+1.46	1.84	0	6	22	0	8	s.	J. W. Keithley
Liberty	Clay	864	28	64.0	−5.5	88	13	35	21	35	6.27	+1.98	4.38	0	5	21	6	3	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	58.6	−6.8	85	14	32	20+	47	2.47	−1.77	1.08	0	7	19	3	8	s.	J. R. Brink.
Oregon	Holt	1,048	61	60.0	−7.1	82	13	33	20	38	1.84	−1.84	0.90	0	7	19	5	6	ne.	Tom Curry.
St. Joseph	Buchanan	967	45	62.8	......	88	13	34	21	35	4.53	+1.18	3.55	0	10	17	7	6	s.	U. S. Weather Bureau
Tarkio ++	Atchison	976	5	61.6	−4.6	87	13	30	21	42	3.00	−0.51	1.36	0	10	20	5	5	sw.	John F. Frazier.
Trenton	Grundy	822	22	61.5	−6.0	82	1+	35	20+	31	2.26	−1.97	0.80	0	9	18	7	5	n.	W. H. Estes.
Section means and extremes				62.1	−5.8	90	28	29	21	50	3.67	−0.42	4.41	0	7	19	5	6	s.	
State means and extremes				62.3	−6.7	96	1+	29	21	50	4.73	+0.77	6.61	0	7	17	6	7	s.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record. but all complete reports used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

+ Also on other dates. ++ Received too late to be included in means and summaries. ‡‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for September, 1918.

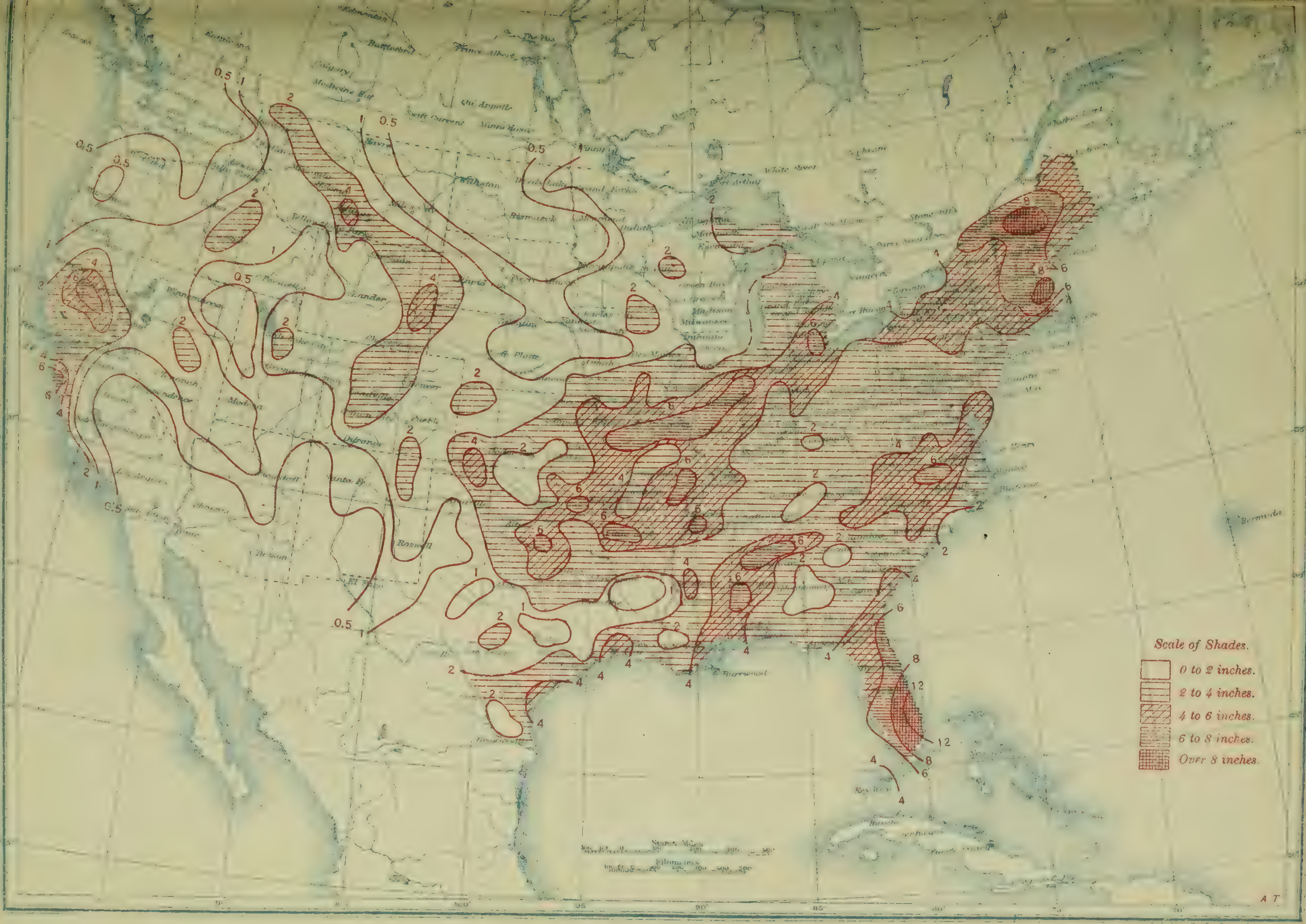
Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Northeast Plain.																																	
ville	Missouri		2.04	.52	1.28	.10						.05				.24	.72	.05		.28													5.28
swick	Grand		1.20		2.11							.13				.12	.50																4.06
on Hill	Chariton				.70							.10				.75	.30																1.85
ia**	Missouri		6.61	.27	1.63						.03	.03			T	.60	.18		.13	.21											T		9.69
tte	do		2.63		1.10					T.	T.	.06				.27	.60		T.							T.					T.		4.66
on	do		3.26		1.90						T.	.05				.10	.95			.64													6.90
roe	Meramec		T	.60	1.32	1.05						.06					1.00	.25		1.10							T.						5.38
n	Mississippi		1.04		.67					.52					.03	.03											T.				.19		2.48
bal**	do	T.	2.70	.15	1.60					T.	.02	.19		T.	T.	.97	.11	.03	.01	T.						T.					.11		5.89
part	Missouri		1.10	1.05	2.65	.36						.04				T.	.90	.26		1.30							T.						7.66
son City	do		1.10	.63	1.92	.10										.05	1.12	.21		.72													5.85
esville	Chariton																																
sville	Mississippi		.58		.63						.20	.27				.09										.03					.24		2.04
iana	do		1.60		2.00							.12				.90	.43									T.					.02		5.07
n	Chariton		1.23	.27	.68	.04						.26			.05	.45		.37															3.35
o	Mississippi		1.15	.40	1.60	.20						.10				.85	.70																5.00
eld	Meramec		.89		3.02							.03			T.	.13	1.16			1.12						.02							6.37
na	do		.14	.50	1.39	1.06						.04	T.				.90	.40		1.15							.17						5.75
ra	Mississippi		1.18	.53	1.09						T.	.35				.52	.22	.13	T.	T							.09						4.11
atherine	Grand		.75		.50							.20			.01	.17	.10																1.73
arles	Missouri		1.00		3.18												1.40	.10	T.	1.00													6.68
uis (1)**	Mississippi		.97	.04	1.93							.03			T	.51	.63		.02	.87						.09							5.09
uis (2)	do		1.14	.09	2.34							.04			.01	.48	.47		.04	.90						.16	T.						5.67
ma	do		1.30		.78							.25				.60	.45														.10		3.48
ville	do		1.25		.85						.07	.32				.50	.18									T.					.20		3.37
n	Meramec		.22	.69	1.80	1.30						.08					.95	.46		.95	.03												6.48
nville	Grand		2.40		.90	.15					T.	.50				T.	T.		T.														3.95
y Park	Meramec		.35	.63	1.28	1.00											.75	.49		1.10													5.60
enton	Mississippi		1.09	.78	1.52	.11						.03				.01	.96	.22		.86							T.						5.58
kuk, Iowa**	do		.51	.11	.32						.18	.44		T.	.06	.01	T.	.03									T.				.11		1.77
east Lowlands.																																	
Girardeau	Mississippi																																
ersville	do		.50	1.30	.25											T.	1.68	T.	T.	.68						T.	1.95						6.36
phan	Black		.26		2.25			.07								3.10			.31							.70	.10						6.79
son	Mississippi		.58		1.28							.05				.08	2.25				.28					.21	.23						4.96
e Hill	do			2.00													2.80			.30						.30							5.40
Madrid	do			.14	.02	.67						T.	.01				.57	.32	.13	.20	.16						1.35	.39					3.96
n (near)	do											1.10					1.80			.40							.25						3.55
ar Bluff ‖	Black			.52	1.60	.57		T.				T.	T.				1.21	1.94		.28	.05						.34	T.					6.51
o, Ill.**	Mississippi		.26	.26	1.37							.03				.01	2.62			.09						.57	.08						5.29
k Plateau.																																	
a	Gasconade		.55	.26	.16	.49						.01	T.				.75	.86		.57							.30						3.95
gton ‖	Black		.67		.95	.13											1.25		.03								.24						3.26
tree	Osage		.49		1.08												2.80		.52							.58							5.47
ar	White		.63	.14	.57											.08	.88			.39						.71							3.40
ille	Gasconade				1.55											T.	.53			1.17						2.00	T.						5.25
ser	Neosho																																
	Osage		.28	T.	1.93		.35									.03	2.36			1.95													6.90
n	Black		1.42		2.20											.13	1.30		.40				.10										5.55
ington	Meramec		.97		.60							T.	.06			T.	1.73			.53						.06							3.95
	Black		.31	T.	.92											T.	1.37			.48						T							3.08
land	White		.47		.77											.05	1.58			.50													3.36
ster	Gasconade	.25	.50		1.22		.26									1.90										1.11							5.24
ton	Mississippi		.23	T.	.47											.19	1.55			.48						T.							2.92
konong	Black		.29	.31	.90			.05								.03	1.75			.70						.65	.03						4.71
non ‖	Osage		.32		.76	.04											.78	.08		.59						.77							3.34
wood	do		.62	1.31												.16	1.10			1.29						.64							5.12
tain Grove ‖	White			.24	.82	.22										.62	.70		.52								.27						3.39
o	Neosho		.26		1.61		.03									.05	.17	T.	.02	2.08						.96	.07						5.25
	Meramec		.35	.37	.88	.44											.96	.54	T.	.52							T.						3.86
gfield ***	White		.18	.37	.46	T.	.01				T.	T.			T.	.09	1.45	T.		1.02						1.24							4.82
lie	Meramec		.10	1.70	.95	.54											1.42	.45		.43							.16						5.75
mbia ‖	Osage		.62	.25	4.20	.14						T.					1.23	.23	T.	.38							.22						7.27
thwest Plain.																																	
t	Osage	T.	.68	.66	2.13											.10	.50			.06						.14							4.27
ton City	do		.72	.68	1.33											.10	.91			.06						.18							3.98
n	do		1.93	.80	1.50											1.32				.20						.15							5.90
sonville ‖	do		2.20	.38	1.73	.05						.05				.09	1.03			.60						.02							6.15
n	Neosho		.25		1.90											T.	.83	T.		.75						T.	.44						4.17
nte	Missouri		T.	.05	.43	2.30										.45	.62			.70						T.							4.55
all	do		4.52		1.99	T.					.03	.04			T.	.18	.75			.08						T.					T.		7.59
da	Osage		.92	.54	2.97											.06	.55	.01		.22						.46							5.73
la	do		.85	.10	3.50											.06	.94		T.	.06						.15							5.66
nsburg	Missouri																																
aw	Osage		1.25	1.35	1.45											.30	1.68		.05	.18						.15							6.41
erly	Missouri		1.92	1.52	1.47	.04					T.	.09				.04	.64	.02								T.							5.74
thwest Plateau.																																	
n	Grand	1.00		1.60							.25				.50	.40															.05		3.80
ny	do		1.83	.25												.20										.20					.30		2.78
othe ‖	do	1.00	.60		.80							.20				.05	.30																2.95
ption	Missouri	T.	1.82	T.	.42					.08	.17					.06		T.	.03							.06					.21		2.85
tin	Grand	T.	1.15		.71					T.	.20	.06			T.	.15	.04		T.							.22	T.				.10		2.63
City	do		1.05	T.	1.78						.35	.05				T.			T.	T						T.	T.				.59		3.82
s City***	Missouri	1.36	3.05	.89	.56					T.	.07					.63	.02	.03	.62	.03					T.	.03							7.29
o	Grand		2.20	.12	.62	.02					.01	.18				.03	.26		.03							.18	.20						3.85
gton	Missouri		1.84	.41	1.15							T.				.07	.56										.01						4.04
y	do		4.38		1.23					T.	.06					.10	.50									T.							6.27
ille	do		1.08		.82						.12	.16				.16			.05							.08	T.						2.47
n	do		.90		.37					T.		.19					.17	.08								.12					.02		1.84
eph***	do	1.00	2.55	.27	.10					.02	.16				T.	.21	.07	.04							T.	.11					T		4.53
	do	.23	1.36	.07	.28					.16	.20					.14		.07								.11					.38		3.00
n	Grand	.79		.80	.05					.07	.21				.03	.05	T.								T.	.04					.22		2.26

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the of observation. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch egular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded.

Daily temperatures for [illegible]

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Northeast Prairie.																															
Brunswick [illegible]	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis D	Maximum	[illegible]	[illegible]	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	66	64	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum	[illegible]	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	56	64	59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																															
Caruthersville	Maximum	[illegible]	[illegible]	[illegible]	84	[illegible]	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	62	[illegible]	70	64	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	Maximum	[illegible]	[illegible]	[illegible]	75	72	71	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	64	67	68	61	[illegible]	[illegible]	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jackson	Maximum	84	[illegible]	[illegible]	[illegible]	75	71	[illegible]	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	[illegible]	[illegible]	[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	Maximum	95	94	[illegible]	[illegible]	[illegible]	77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	54	72	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Poplar Bluff	Maximum	[illegible]	84	79	87	79	[illegible]	[illegible]	84	83	83	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	52	52	62	61	55	45	51	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ozark Plateau.																															
Arcadia §§	Maximum	84	75	76	77	70	70	[illegible]	[illegible]	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	[illegible]	62	64	58	[illegible]	[illegible]	[illegible]	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Birch Tree	Maximum	80	71	78	79	73	70	74	78	....	....	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	61	[illegible]	61	57	52	[illegible]	[illegible]	....	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cassville	Maximum	[illegible]	88	[illegible]	[illegible]	59	[illegible]	[illegible]	[illegible]	[illegible]	74	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	[illegible]	68	58	51	[illegible]	43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Eldon	Maximum	86	85	78	68	70	76	82	[illegible]	80	[illegible]	[illegible]	[illegible]	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	65	58	56	48	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	54	37	[illegible]	[illegible]	[illegible]	[illegible]
Farmington	Maximum	[illegible]	78	77	76	[illegible]	82	[illegible]	[illegible]	81	86	84	77	82	80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	51	62	61	53	57	51	[illegible]	49	[illegible]	[illegible]	64	62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gano	Maximum	81	75	76	71	68	65	71	78	81	82	82	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	[illegible]	[illegible]	60	56	53	49	[illegible]	[illegible]	47	55	61	51	44	[illegible]	[illegible]	[illegible]	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hollister	Maximum	78	[illegible]	80	87	80	82	84	78	78	78	78	76	78	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	66	64	70	64	56	50	53	52	[illegible]	[illegible]	54	[illegible]	51	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40	[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]
Koshkonong	Maximum	81	[illegible]	81	77	73	71	75	78	81	81	83	[illegible]	81	84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	65	65	[illegible]	63	58	55	54	55	[illegible]	[illegible]	62	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lebanon §§	Maximum	[illegible]	82	73	71	69	73	74	76	78	80	82	77	82	82	[illegible]	[illegible]	68	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	59	64	64	44	53	52	46	46	50	50	[illegible]	50	47	49	47	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mountain Grove §§	Maximum	79	78	77	72	71	68	72	78	78	79	82	78	81	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	57	58	64	68	55	50	49	47	49	50	56	[illegible]	49	52	[illegible]	[illegible]	[illegible]	41	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Neosho	Maximum	[illegible]	96	88	76	69	68	75	78	81	83	83	83	85	[illegible]	86	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	77	[illegible]	[illegible]
	Minimum	52	66	[illegible]	56	55	50	42	45	48	53	61	47	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rolla	Maximum	81	82	82	71	72	73	76	82	82	81	[illegible]	[illegible]	[illegible]	83	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	55	72	69	67	55	50	50	50	51	59	64	[illegible]	[illegible]	60	67	53	41	42	45	[illegible]	37	[illegible]	45	[illegible]	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Springfield	Maximum	86	83	89	70	68	64	73	74	76	78	81	77	81	[illegible]	[illegible]	[illegible]	63	78	[illegible]	[illegible]	63	[illegible]	71	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum	69	68	67	56	[illegible]	51	52	44	56	60	66	56	56	62	[illegible]	49	45	42	[illegible]	[illegible]	[illegible]	[illegible]	48	53	55	50	42	[illegible]	[illegible]	52
Southwest Prairie.																															
Amoret	Maximum	84	81	81	66	70	77	80	81	83	78	87	85	90	93	[illegible]	66	66	74	[illegible]	61	72	74	77	81	74	71	[illegible]	[illegible]	[illegible]	71
	Minimum	53	67	62	52	49	51	48	[illegible]	52	57	64	50	50	61	64	49	[illegible]	[illegible]	[illegible]	[illegible]	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Appleton City	Maximum	85	85	77	68	70	72	77	[illegible]	[illegible]	80	84	83	87	91	86	67	68	[illegible]	[illegible]	61	67	72	76	81	[illegible]	[illegible]	[illegible]	82	[illegible]	[illegible]
	Minimum	58	67	64	56	51	53	56	[illegible]	63	59	[illegible]	62	[illegible]	61	62	[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	52	[illegible]	56	[illegible]	[illegible]	41	53
Clinton	Maximum	85	86	81	68	72	74	75	[illegible]	81	80	[illegible]	85	83	91	80	[illegible]	76	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	74	75	75	72	84	81	[illegible]
	Minimum	53	67	63	55	56	51	36	[illegible]	[illegible]	58	[illegible]	51	48	60	60	40	40	[illegible]	[illegible]	[illegible]	31	[illegible]	[illegible]	40	59	57	41	[illegible]	47	[illegible]
Harrisonville §§	Maximum	88	[illegible]	75	58	69	71	78	[illegible]	83	78	82	81	88	88	67	65	71	68	[illegible]	[illegible]	[illegible]	[illegible]	76	[illegible]	80	[illegible]	[illegible]	[illegible]	79	[illegible]
	Minimum	[illegible]	56	61	54	49	54	47	47	53	52	61	[illegible]	50	55	63	[illegible]	40	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48	53	[illegible]	40	[illegible]	41	[illegible]
Lamar §§	Maximum	85	89	79	63	75	70	77	86	87	83	87	86	[illegible]	[illegible]	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	81	66	[illegible]	71	82	[illegible]	[illegible]
	Minimum	[illegible]	67	67	61	52	55	46	50	51	[illegible]	64	49	50	[illegible]	64	[illegible]	[illegible]	58	[illegible]	[illegible]	[illegible]	41	40	[illegible]	[illegible]	[illegible]	41	[illegible]	[illegible]	46
Lamonte	Maximum	[illegible]	[illegible]	79	69	70	72	77	79	[illegible]	80	82	78	85	96	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	77	[illegible]	[illegible]	[illegible]	81	82	[illegible]	[illegible]
	Minimum	[illegible]	65	50	55	[illegible]	46	48	53	51	62	64	52	48	76	49	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48	62	60	51	34	[illegible]	[illegible]	[illegible]
Marshall	Maximum	[illegible]	84	....	76	72	74	79	[illegible]	82	87	87	85	....	[illegible]	78	[illegible]	[illegible]	[illegible]	[illegible]	64	[illegible]	72	[illegible]	[illegible]	[illegible]	71	....	84	[illegible]	74
	Minimum	54	63	54	[illegible]	48	48	47	49	51	62	62	....	....	78	60	[illegible]	[illegible]	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40	....	[illegible]	[illegible]	[illegible]
Warrensburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	86	85	84	65	69	72	77	82	82	80	85	80	85	90	80	67	70	70	65	61	69	73	74	80	70	69	[illegible]	82	74	72
	Minimum	[illegible]	67	60	58	49	48	44	[illegible]	47	52	65	46	44	61	63	50	37	49	[illegible]	[illegible]	32	35	41	43	60	54	35	33	45	45
Northwest Prairie.																															
Chillicothe §§	Maximum	87	[illegible]	76	62	73	76	80	82	83	68	82	77	87	88	69	[illegible]	71	65	[illegible]	64	[illegible]	73	[illegible]	81	78	74	[illegible]	[illegible]	82	[illegible]
	Minimum	[illegible]	[illegible]	61	[illegible]	[illegible]	41	46	51	72	[illegible]	60	15	19	[illegible]	[illegible]	[illegible]	40	44	40	[illegible]	[illegible]	34	[illegible]	50	51	53	[illegible]	[illegible]	[illegible]	47
Grant City	Maximum	86	81	75	65	67	76	80	[illegible]	[illegible]	72	79	76	87	86	79	[illegible]	72	[illegible]	[illegible]	60	[illegible]	[illegible]	[illegible]	78	77	72	76	[illegible]	84	71
	Minimum	[illegible]	65	58	49	45	41	[illegible]	[illegible]	52	53	[illegible]	49	[illegible]	[illegible]	[illegible]	47	41	42	44	[illegible]	[illegible]	[illegible]	[illegible]	51	[illegible]	51	[illegible]	46	40	44
Kansas City	Maximum	[illegible]	[illegible]	73	64	[illegible]	70	77	79	80	72	81	79	87	[illegible]	68	65	69	62	[illegible]	63	[illegible]	[illegible]	[illegible]	78	[illegible]	69	71	83	79	[illegible]
	Minimum	63	64	[illegible]	[illegible]	50	52	57	59	[illegible]	[illegible]	65	57	61	67	[illegible]	51	[illegible]	47	47	[illegible]	44	[illegible]	53	[illegible]	[illegible]	54	[illegible]	52	[illegible]	47
[illegible]	Maximum	[illegible]	[illegible]	74	62	70	74	78	[illegible]	79	66	79	[illegible]	[illegible]	86	66	65	68	[illegible]	58	60	68	[illegible]	72	80	77	70	[illegible]	[illegible]	78	[illegible]
	Minimum	58	64	64	[illegible]	44	49	53	58	58	62	61	[illegible]	53	62	[illegible]	50	46	[illegible]	47	41	40	42	49	52	[illegible]	41	[illegible]	[illegible]	[illegible]	50
[illegible]	Maximum	[illegible]	83	80	60	70	75	78	80	81	75	[illegible]	86	86	86	65	66	70	64	62	[illegible]	[illegible]	72	75	80	80	72	72	85	72	62
	Minimum	[illegible]	[illegible]	62	[illegible]	48	45	[illegible]	55	[illegible]	63	60	52	[illegible]	63	60	51	42	51	50	[illegible]	[illegible]	41	50	50	[illegible]	[illegible]	37	[illegible]	45	50
Maryville §§	Maximum	81	83	[illegible]	[illegible]	70	71	79	80	78	65	79	66	84	85	63	70	66	[illegible]	48	60	[illegible]	73	75	76	80	72	[illegible]	[illegible]	79	[illegible]
	Minimum	[illegible]	64	[illegible]	47	43	43	[illegible]	52	51	51	52	48	48	53	56	48	40	40	40	32	[illegible]	[illegible]	46	46	48	50	35	[illegible]	35	45
Oregon	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	64	[illegible]	[illegible]	77	77	67	78	74	[illegible]	81	79	63	66	58	[illegible]	55	63	70	74	79	75	74	70	81	79	72
	Minimum	[illegible]	63	51	[illegible]	41	45	53	51	55	[illegible]	55	45	53	57	51	46	[illegible]	40	43	33	36	43	51	49	[illegible]	40	30	[illegible]	[illegible]	43
St. Joseph	Maximum	[illegible]	81	74	[illegible]	70	73	79	81	81	76	79	77	88	[illegible]	68	67	70	63	66	60	68	75	77	78	80	[illegible]	73	[illegible]	81	[illegible]
	Minimum	62	66	54	[illegible]	49	47	56	59	60	62	59	53	56	61	54	50	48	43	[illegible]	38	[illegible]	45	[illegible]	52	60	49	38	50	46	46
Trenton	Maximum	[illegible]	[illegible]	74	[illegible]	[illegible]	71	[illegible]	77	79	71	76	74	81	[illegible]	78	63	70	68	[illegible]	[illegible]	[illegible]	68	74	[illegible]	76	74	68	76	74	69
	Minimum	[illegible]	66	62	52	45	46	53	56	55	62	62	49	52	60	58	50	44	45	[illegible]	[illegible]	35	[illegible]	[illegible]	50	58	58	37	46	48	45

[illegible] indicates [illegible] 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day [illegible]


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Edmonton
Battleford
Prince Albert
The Pas
Calgary
Medicine Hat
Qu' Appelle
Swift Current
Havre
Williston
Bismarck
Moorhead
Duluth
Port Arthur
White River
Marquette
Escanaba
Green Bay
Madison
Milwaukee
Dubuque
Lander
North Platte
Denver
Pueblo
Durango
Santa Fe
Roswell
El Paso
Tucson
Winnemucca
Modena
Flagstaff
Bermuda
Key West
Havana
Statute Miles
Kilometres
A T

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR SEPTEMBER, 1918, AT THE UNIVERSITY OF MISSOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 69 and 70.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude 38° 57'. Longitude 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a. m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B. W. G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standards described in Circular L. Horizontal [illegible] of the anemometer [illegible] pan, 2 inches. Height of cups of anemometer [illegible] inches. The instrument shelter is five feet southeast of the pan; [illegible] of thermometers above ground, 11 feet. Distance of each [illegible] 2.6 feet. The ground in the immediate vicinity of the pan [illegible] north, average 5 per cent grade. The soil is covered by blue [illegible] being part of the University campus. There are no bodies of water, nor are there any irrigation projects under way nearby. The [illegible] topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising [illegible] being George Reeder, Meteorologist and Section Director. The [illegible] tions in the table herewith, were taken by [illegible] R. [illegible] Observer, Weather Bureau. This is one of the [illegible] signed to furnish practical information [illegible] complete climatic records have been made at Columbia [illegible] Weather Bureau for about 29 years. These records [illegible] are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for September, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Daily evaporation	.171	.093	.080	.069	.100	.107	.076	.117	.110	.116	.127	.167	.165	.102	.092	.053
Daily wind movement	19	32	21	55	39	21	14	12	14	15	13	30	29	17	26	29

Date.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	3
Daily evaporation	.080	.093	.088	.184	.095	.075	.090	.106	.097	.154	.120	.137	.082	.118	..
Daily wind movement	20	27	23	25	25	27	10	17	16	16	37	14	21	17	..

*Total in next following measurement. †Indicates minus (—). Observations taken at 7:45 a. m., 90th meridian summer tim

OBSERVERS' REMARKS.

Avalon—This has been a poor season for bees; there is no surplus honey.

Grant City—All farm work about finished. Most of the wheat and has been sown, and up; the wheat acreage is the largest ever sown in this country.

Appleton City—The weather has been favorable for plowing and sowing but it is getting dry. Frost occurred on the 20th but there was no damage.

Lamonte—Excellent weather for fall work. Many farmers finished sowing wheat. Pastures fine. Frost on the 20th, 21st, and 22d, but resulted in no damage.

Warsaw—The fine rains on the 2d, 3d, and 4th broke the serious drought of the summer and have made a fine working season with fine pastures. Wheat sowing is progressing.

Arcadia—The first light frost occurred on the 21st.

Bolivar—Light frost on the 20th, and 21st, but no damage.

Cassville—There was a high wind on the night of the 18th; some little damage.

Eldon—No damage to corn by frost. Most all corn has been cut.

Farmington—The month as a whole has been cool and damp for September. Late crops and garden truck ripened imperfectly. There were light frosts on the 20th, 21st, and 22d.

Houston—We have had some cool weather this month, with several large white frosts, but little or no damage. Late is almost matured.

Lebanon—Light frost on the 20th; no damage.

Lockwood—The month has been cooler than normal, early frosts, which did little damage. Farm work wel vanced; some wheat sown; ample moisture.

Mountain Grove—Heavy frost on the 21st, but no dama

Caruthersville—Excessive rainfall this month.

Poplar Bluff—Only light frost in this vicinity.

Brunswick—There was light frost on the 17th.

Fayette—Very cool month, and dry.

Mexico—Light frost on the 20th, and 21st.

Oakfield—Light frost on the 20th; no damage.

St. Catherine—The weather has been favorable for di out corn. Wheat needs rain; nearly all sown; pastures need rain.

Warrenton—The rains put new life into pastures, and pared the ground for plowing. Slight frost damage in places on the 20th, and 21st.

TORNADOES.—A small tornado cloud occurred near Sp and Ozark, Christian County, at about 4.30 p. m., Septe 2d. Its general direction was from the southwest toward northeast. Some trees were torn up, barns blown down, wheat stacks scattered about. There was no injury or lo life.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

[illegible]
JUN 10 [illegible]

CLIMATOLOGICAL DATA

MISSOURI SECTION

IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

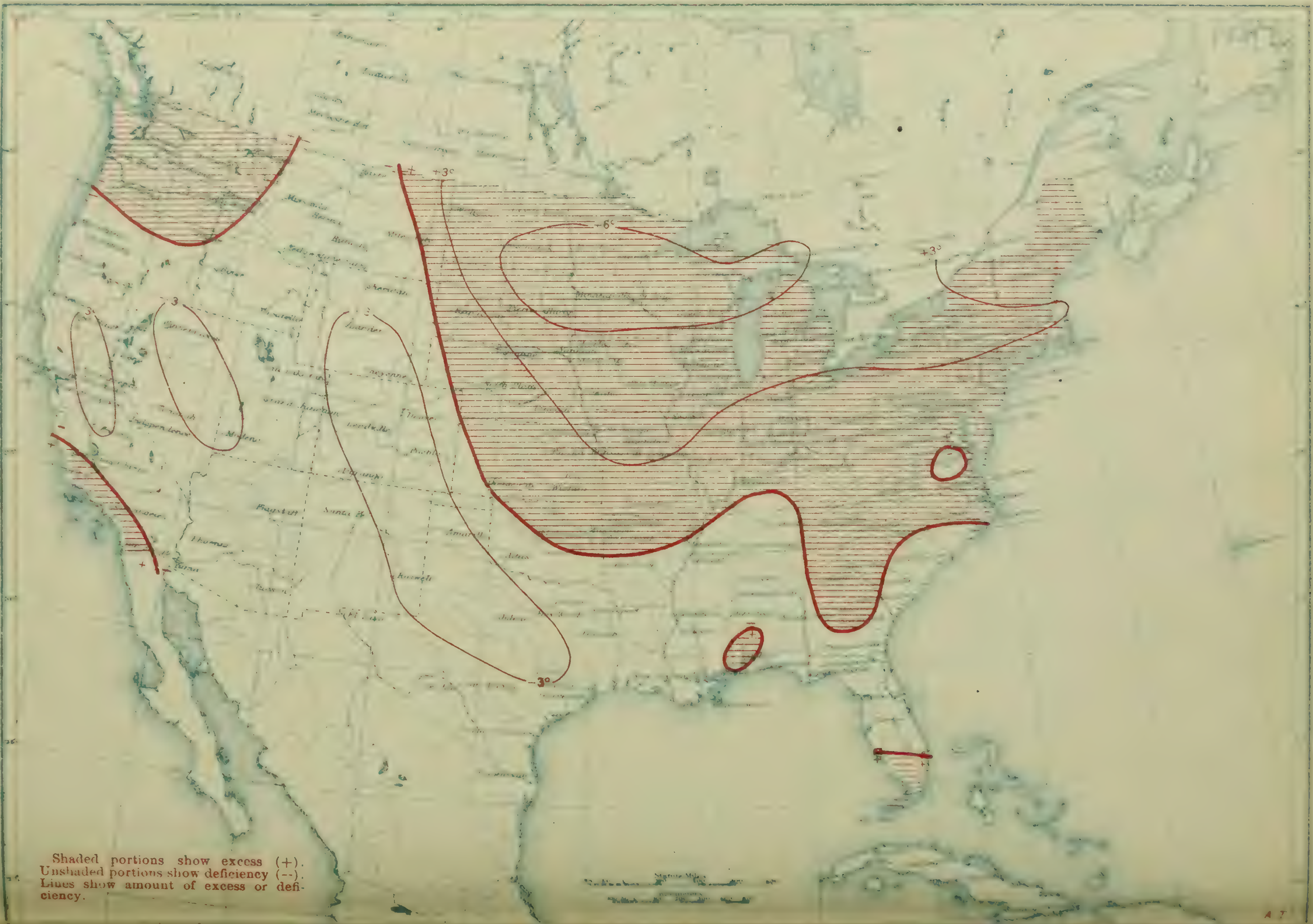
NOVEMBER, 1918

BY

GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
DEC. 22, 1918.

Departure of the Mean Temperature from the Normal, November, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (--).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

Vol. XXII. Columbia, Mo., November, 1918. No. 11

GENERAL SUMMARY.

The first 20 days of the present month, taken with the preceding month of October, made up a period of about 50 days of exceptionally fine autumn weather, that was favorable for traffic and the sports, as well as for all farm work. The last ten days of November gave a touch of winter, although in a modified form.

The first killing frost of the season occurred on the 1st. In October a few local killing frosts occurred, but they were, as a rule, confined to the extreme northern counties. There was no damage, as all vegetation had about run its natural course to maturity. There were no damaging storms.

At the close of the month wheat was in fine condition generally; much had made rank growth and was being pastured to prevent jointing. Fly was reported at a few points, but not in sufficient numbers to cause apprehension. Stock was in fine condition, with plenty of winter grass and water. Considerable corn was still in the fields, principally owing to a shortness in capable help.

TEMPERATURE.

The monthly mean for the State, as shown by the records of 55 stations, was 44.9°. The departure from the normal for 62 stations having 10 or more years' record was plus 0.5°. The mean temperature was nearly 1° below normal in the Ozark Plateau; nearly normal in the southwestern plain, and more than 1° above normal in the three other divisions. During the first two decades the temperatures were quite steadily above normal, but during the last decade there was an average daily deficiency of about 7°. The warmest days were the 5th and 6th; and the coldest days were the 24th, 25th, and 30th. Only four stations experienced a maximum temperature of 80° or higher, the highest being 85°, at Macon on the 6th. There were only 13 days, as an average, with temperature 32° or lower, and the distribution was quite uniform. There were no zero temperatures, the minimum being 12°, at Maryville, Nodaway County.

PRECIPITATION.

The average precipitation, 81 stations reporting, was 3.18 inches. The departure from the normal for 73 stations having 10 or more years' record was plus 0.79 inch. The precipitation was quite evenly distributed over the State, and fell in short periods at regular intervals of about a week or ten days. It was above the normal in all sections, except southeast, the southwestern plain and northwestern plateau being relatively wetter.

Snow flurries fell on several dates during the last decade in all sections of the State but melted as fast as they fell. On the 27-28th, however, the ground was quite well covered in the northwestern counties, the total for the month there ranging between 2 and 7 inches.

EVAPORATION.

At Columbia, Mo., the total evaporation for the month was .196 inches. The total precipitation was 2.47 inches; the wind movement over the surface of the pan was 1,391 miles; the mean temperature, 44.9°, and the percentage of sunshine, 52. During the same month in 1917, these data were, in order named: 1.500 inches; 0.10 inch; 1,154 miles; 45.4°, and 54 per cent.

WIND.

The prevailing winds were from the northwest. The average monthly movement, 8 stations equipped with anemometers reporting, was 7,357 miles, or an average hourly velocity of 10.2 miles. This is about 4 per cent above normal. Strong winds occurred the 17th, 18th, and 28th, but no damage resulted.

SUNSHINE AND CLOUDINESS.

From about the 18th to the 23d, inclusive, dense cloudiness prevailed, the sun scarcely showing at all; otherwise the month was bright. The average number of hours of sunshine was 167, or about 55 per cent of the possible, and about 2 per cent below normal.

MISCELLANEOUS PHENOMENA.

Fog--4th, 10th, 12th, and 26th. Frost--(First general killing frost of the season), 1st. Halos, lunar--14th; solar--14th. Hail--On the 16th, at St. Louis, and Keokuk, Ia. Thunderstorms--6th, 16th, and 17th.

ERRATA FOR SEPTEMBER, 1918.

Lamonte--September 2d, precipitation recorded .05 inch, should be 5.00 inches; total for month recorded 1.55 inches, should be 9.50 inches.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.08	81	......	157	52	6,124	8.5	30	sw.	28
Hannibal	30.07	81	......	......	......	6,790	9.4	33	sw.	28
Kansas City	30.08	76	66	172	57	8,737	12.1	41	nw.	18
St. Joseph	30.06	83	71	156	52	6,834	9.5	34	nw.	18
St. Louis	30.09	74	66	158	52	9,686	13.5	52	sw.	28
Springfield	30.09	84	73	181	59	7,851	10.9	44	nw.	17
Cairo, Ill	30.10	76	61	......	......	6,467	9.0	48	sw.	28
Keokuk, Iowa	30.08	82	67	176	59	6,266	8.8	32	w.	28

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	41.6	−2.9	87	15	3.26	+0.94	.....	.....	11	....	....	....
1889	39.9	−3.7	73	8	3.43	+1.11	.....	.....	7	....	....	....
1890	46.5	+2.9	80	20	2.31	−0.01	.....	.....	5	....	....	....
1891	39.6	−4.0	82	−2	3.60	+1.28	.....	.....	5	....	....	....
1892	40.1	−3.5	79	9	2.60	+0.28	.....	1.0	6	11	7	12
1893	40.9	−2.7	79	−1	1.59	−0.73	4.86	0.3	4	14	9	7
1894	41.0	−2.6	80	3	1.58	−0.74	2.20	T.	4	15	9	6
1895	41.6	−2.0	82	2	3.37	+1.05	2.98	3.2	8	10	7	13
1896	42.3	−1.3	82	5	2.18	−0.14	4.00	0.2	6	11	7	12
1897	43.4	0.2	82	−3	2.40	+0.08	3.39	T.	6	13	8	9
1898	39.9	−3.7	79	−8	2.28	−0.04	2.75	2.3	6	14	8	8
1899	49.5	+5.9	82	16	1.90	−0.42	2.66	0.2	7	11	9	10
1900	43.7	+0.1	84	7	2.58	+0.26	4.57	0.2	6	15	7	8
1901	43.6	0.0	84	9	1.38	−0.94	1.90	0.3	4	17	7	6
1902	50.1	+6.5	85	18	3.52	+1.20	2.14	0.4	9	8	9	13
1903	40.9	−2.7	79	2	1.24	−1.08	2.44	1.1	5	13	8	9
1904	46.3	+2.7	83	11	0.22	−2.10	0.68	T.	2	21	5	4
1905	45.8	+2.2	83	2	1.94	−0.38	2.49	T.	6	15	6	6
1906	42.5	−1.1	88	−3	2.60	+0.28	3.60	5.0	8	12	6	12
1907	43.8	+0.2	88	5	2.52	+0.20	3.00	T.	4	19	4	7
1908	47.6	+4.0	87	9	4.14	+1.82	4.00	0.2	8	15	7	8
1909	53.6	+10.0	87	11	4.43	+2.11	6.18	0.4	8	12	7	11
1910	42.0	−1.6	83	11	0.38	−1.94	0.70	0.1	3	15	8	7
1911	39.1	−4.5	93	−3	2.55	+0.23	2.15	1.1	7	13	6	11
1912	45.9	+2.3	88	12	1.52	−0.80	2.37	0.1	3	20	5	5
1913	51.7	+7.4	80	11	2.73	+0.35	2.50	T.	7	10	8	12
1914	43.6	+4.0	89	2	0.65	−1.84	1.90	0.1	3	19	6	5
1915	49.5	+4.9	87	12	2.76	+0.33	2.62	0.1	5	16	7	7
1916	49.6	+4.9	85	3	2.49	+0.14	2.53	0.1	4	19	4	7
1917	46.1	+1.5	80	8	1.05	−1.46	3.26	T.	3	14	5	11
1918	44.9	+0.5	85	12	3.18	+0.79	4.60	1.2	6	15	4	11

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	....	....	....	....	..	..	..	..	......	Wm. R. Bennett.
Boonville	41	2.81	+0.42	1.03	T.	8	13	1	16	s.	C. Rauuecker.
C. Girardeau	11	2.90	−1.01	0.90	0	4	11	2	17	w.	D. L. Albert.
Glencoe	1	3.07	....	0.89	0	8	14	4	12	......	L. M. Beard.
Hermann	44	3.11	+0.29	0.80	T.	8	13	3	14	sw.	E. J. Maushund.
New Madrid	24	2.42	−1.53	1.05	0	6	14	3	13	ne.	Miss Josie Smith.
Osceola	18	5.20	+2.16	3.45	0	7	11	3	11	......	Wm. E. Mathews.
Pacific	1	2.64	....	0.82	0	9	11	2	17	w.	Mark Waters.
Steelville	16	4.09	+1.35	1.20	0	7	15	0	15	sw.	F. Kreamelmeyer.
Tuscumbia	1	3.40	....	0.97	T.	8	15	0	15	s.	C. B. Wright.
Union	1	2.53	....	0.90	0	8	13	2	15	sw.	J. Wm. Keller.
Valley Park	1	....	....	....	....	..	..	..	..	......	T. W. McNeese.
Waverly	3	2.75	....	0.73	0	6	19	1	10	sw.	J. W. Cauthorn.

Climatological data for November, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fah.							Precipitation, in inches.				Number of days.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Snow, unmelted.	With 0.01 or more.	Clear.	Partly cloudy.	Cloudy.		
Northeast Plain.																				
Brunswick	Chariton	[illegible]	25	[illegible]	+3.6	75	6	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Clifton Hill	Randolph	[illegible]	...	46.0	+2.3	77	6	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Boone	[illegible]	27	[illegible]	[illegible]	77	6	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Howard	[illegible]	[illegible]	43.2	[illegible]	[illegible]	6	20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fulton	Callaway	[illegible]	13	44.8	[illegible]	77	6	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gorin	Scotland	[illegible]	[illegible]	.....	.....	.....	.....	.....	.....	.....	[illegible]	[illegible]	1.12	T.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Marion	[illegible]	24	[illegible]	−3.9	76	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City	Cole	[illegible]	31	43.7	−0.7	77	6	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	2	[illegible]	n.	[illegible]
Keytesville	Chariton	[illegible]	4	.....	.....	.....	.....	.....	.....	.....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Adair	[illegible]	25	43.4	+3.1	[illegible]	6	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Pike	[illegible]	[illegible]	42.8	−1.3	67	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon	Macon	[illegible]	19	42.5	−1.7	[illegible]	6	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	Audrain	[illegible]	39	44.2	+1.1	76	6	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Franklin	793	36	46.2	0.0	77	6	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Palmyra	Marion	[illegible]	5	[illegible]	[illegible]	[illegible]	7	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catherine	Linn	850	4	[illegible]	.....	[illegible]	6	18	25	31	[illegible]	[illegible]	[illegible]	T.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Charles	St. Charles	456	39	45.6	−0.2	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	St. Louis City	717	36	[illegible]	+2.8	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	U. S. Weather Bureau.
St. Louis (2)	do.	578	[illegible]	[illegible]	.....	75	6	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shelbina	Shelby	[illegible]	25	.....	.....	.....	.....	.....	.....	.....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Steffenville	Lewis	[illegible]	21	[illegible]	+1.3	75	6	19	[illegible]	37	[illegible]	[illegible]	[illegible]	T.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	Putnam	1,072	21	[illegible]	+1.2	[illegible]	6	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton	Warren	[illegible]	26	[illegible]	+0.5	77	6	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Keokuk, Iowa	Lee, Ia.	574	46	43.8	[illegible]	[illegible]	6	20	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	7	[illegible]	[illegible]	U. S. Weather Bureau.
Section means and extremes				[illegible]	+1.2	[illegible]	6	15	30	43	[illegible]	0.47	[illegible]	[illegible]	7	[illegible]	4	12	w.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	51.6	+1.9	82	4	23	30	29	[illegible]	1.37	[illegible]	T	5	17	6	[illegible]	n.	H. F. Averill.
Doniphan	Ripley	344	12	46.9	−1.1	72	6	25	30	[illegible]	1.87	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jackson	Cape Girardeau	[illegible]	26	46.8	0.0	78	3	22	30	36	2.04	[illegible]	[illegible]	T	4	[illegible]	[illegible]	11	[illegible]	[illegible]
Marble Hill	Bollinger	420	25	[illegible]	+4.5	[illegible]	11	21	30	[illegible]	[illegible]	[illegible]	[illegible]	0	4	[illegible]	[illegible]	7	n.	[illegible]
Patton (near)	Bollinger	500	2	.....	.....	.....	.....	.....	.....	.....	[illegible]	.....	[illegible]	[illegible]	[illegible]					[illegible]
Poplar Bluff	Butler	339	13	48.6	+0.9	78	8	21	30	39	[illegible]	[illegible]	1.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.....	[illegible]
Cairo, Ill.	Alexander, Ill.	359	41	47.8	+0.9	71	6	29	[illegible]	26	[illegible]	[illegible]	[illegible]	0	7	[illegible]	[illegible]	[illegible]	[illegible]	U. S. Weather Bureau.
Section means and extremes				48.4	1.2	84	14	21	30	[illegible]	2.40	[illegible]	[illegible]	T	[illegible]	[illegible]	3	2	[illegible]	
Ozark Plateau.																				
Arcadia	Iron	[illegible]	35	44.8	+0.8	74	[illegible]	22	30	44	2.61	−1.98	[illegible]	0	6	17	[illegible]	[illegible]	w.	Arcadia College.
Birch Tree	Shannon	[illegible]	23	44.0	−2.6	[illegible]	1	24	20	32	2.29	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	s.	[illegible]
Bolivar	Polk	1,071	29	46.0	−1.2	76	[illegible]	23	30	[illegible]	4.74	−2.12	1.94	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cassville	Barry	[illegible]	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[illegible]
Crocker	Pulaski	1,126	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[illegible]
Dean	McDonald	1,000	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[illegible]
Eldon	Miller	[illegible]	16	43.6	−2.0	75	6	20	[illegible]	39	2.76	[illegible]	0.96	T.	[illegible]	9	[illegible]	[illegible]	s.	[illegible]
Farmington	Reynolds	918	3	45.5	+1.6	72	31	[illegible]	[illegible]	[illegible]	2.28	[illegible]	1.11	T.	5	15	2	[illegible]	[illegible]	Robert Forsyth.
Gano	Dent	1,250	13	44.8	−2.8	76	6	20	30	35	3.60	[illegible]	1.30	T.	7	[illegible]	[illegible]	11	[illegible]	[illegible]
Goodland	Iron	[illegible]	12	44.8	[illegible]	75	3	20	30	44	[illegible]	[illegible]	[illegible]	0	5	15	5	[illegible]	n.	[illegible]
Hollister	Taney	755	8	50.3	+2.2	78	3	26	29	42	3.57	[illegible]	[illegible]	0	5	17	6	13	nw.	[illegible]
Houston	Texas	[illegible]	24	46.3	0.1	75	6	21	30	38	[illegible]	+0.22	[illegible]	T	6	16	4	10	nw.	[illegible]
Koshkonong	Oregon	[illegible]	16	47.0	−2.8	75	6	25	30	42	[illegible]	−0.11	0.97	T.	[illegible]	13	[illegible]	12	[illegible]	[illegible]
Lebanon	Laclede	1,265	[illegible]	43.5	−2.8	75	6	20	30	43	4.12	[illegible]	1.23	T	[illegible]	10	8	12	s.	Leonard L. Dickerson.
Lockwood	Dade	[illegible]	22	46.2	2.4	[illegible]	6	25	24	31	5.26	[illegible]	[illegible]	0.2	5	17	3	10	sw.	[illegible]
Mountain Grove	Wright	[illegible]	18	43.8	−3.5	74	6	23	30	57	4.09	+1.80	[illegible]	T	7	9	3	18	nw.	State Fruit Exp. Sta.
Neosho	Newton	1,011	31	46.1	−1.3	76	6	19	30	42	7.60	+4.74	2.95	0.5	10	17	3	10	sw.	W. O. Back.
Rolla	Phelps	1,139	35	46.9	+2.4	75	4	21	30	35	4.29	1.57	1.73	T.	7	14	[illegible]	[illegible]	w.	[illegible] Harris.
Springfield	Greene	1,350	29	[illegible]	+0.9	73	6	25	[illegible]	26	[illegible]	+1.26	1.67	0.4	10	15	6	9	se.	U. S. Weather Bureau.
Section means and extremes				45.6	−0.9	78	31	19	30	44	3.74	+0.76	[illegible]	0.1	6	14	4	12	nw.	
Southwest Plain.																				
Amoret	Bates	831	8	44.4	−1.9	73	5	21	25	33	2.00	−0.21	1.18	T.	3	11	7	12	s.	Darby Fruit Farm.
Appleton City	St. Clair	853	26	46.6	+0.5	75	5	23	25	31	3.45	+1.27	[illegible]	1.0	7	14	5	11	se.	[illegible]
Clinton	Henry	765	30	46.5	−1.1	72	5	22	30	35	3.27	[illegible]	1.95	0	4	15	4	11	sw.	[illegible], M. D.
Harrisonville	Cass	912	41	43.8	+1.4	74	5	18	25	33	2.40	+0.40	0.87	1.0	5	14	4	12	nw.	A. J. Sharp.
Lamar	Barton	980	36	46.5	−0.2	76	4	21	30	36	6.45	+4.26	[illegible]	0	3	13	6	11	s.	Joe W. Springer.
Lamonte	Pettis	863	28	45.0	+0.4	76	6	20	25	42	3.19	+1.19	1.46	T.	4	15	4	11	nw.	J. Ed Hall.
Marshall	Saline	779	26	[illegible]	−1.7	77	6	19	21	36	2.63	[illegible]	1.10	1.0	6	13	8	9	nw.	Dr. W. H. Black.
Nevada	Vernon	860	23	46.7	+2.6	75	5	22	25	33	4.77	[illegible]	3.58	T	5	15	4	11	s.	George A. Kaupp.
Warrensburg	Johnson	883	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. H. Collins.
Warsaw	Benton	715	12	46.2	−2.1	77	6	20	25	41	4.91	2.57	3.25	T.	6	13	11	6	w.	J. R. Smith, M. D.
Section means and extremes				45.6	−0.2	77	6	18	25	42	3.67	+1.57	4.60	0.3	5	14	6	10	nw.	
Northwest Plateau.																				
Avalon	Livingston	730	31	46.7	+2.9	75	6	20	24	24	3.70	+1.77	1.80	2.0	5	16	5	9	sw.	F. G. Ashbaugh.
Bethany	Harrison	916	27	42.6	−0.8	72	6	11	29	30	2.51	[illegible]	1.17	7.0	5	14	4	12	sw.	M. H. Moulton.
Chillicothe	Livingston	768	1	43.3	+0.9	71	5	18	24	31	3.35	[illegible]	2.00	3.0	4	18	1	11	w.	Mrs. Walter Jackson.
Conception	Nodaway	982	[illegible]	42.8	+1.4	72	5	16	21	31	1.74	[illegible]	0.93	3.0	6	11	9	10	nw.	Fr. Adelhelm Hess.
Gallatin	Daviess	863	17	.....	.....	.....	.....	.....	.....	.....	3.13	+1.53	1.40	7.0	9	16	5	9	nw.	Robert R. Wynne, Jr.
Grant City	Worth	[illegible]	21	41.8	−1.0	65	5	15	29	31	2.34	[illegible]	0.85	7.8	4	12	6	12	nw.	W. H. Campbell.
Kansas City	Jackson	963	28	45.6	+1.1	73	5	23	24	25	4.61	+2.76	3.37	3.4	8	11	5	11	s.	U. S. Weather Bureau.
Kidder	Caldwell	1,020	26	44.2	+1.9	72	4	18	29	30	3.60	+1.90	1.34	7.0	5	15	2	13	sw.	J. F. Sharp.
Lexington	Lafayette	688	[illegible]	[illegible]	+0.4	74	5	19	21	33	2.76	+0.89	1.24	4.0	6	17	0	13	n.	J. W. Keithley.
Liberty	Clay	[illegible]	28	[illegible]	1.9	81	8	.....	.....	39	5.30	[illegible]	4.01	2.1	4	18	1	7	s.	W. C. Wilmott.
Maryville	Nodaway	1,036	26	[illegible]	+0.6	72	5	12	30	40	2.55	1.67	0.64	5.0	9	16	1	13	n.	J. R. Brink.
Oregon	Holt	1,048	[illegible]	41.8	+1.6	72	5	15	[illegible]	26	2.46	+0.78	1.60	5.0	5	13	8	9	nw.	Tom Curry.
St. Joseph	Buchanan	967	45	43.7	.....	74	5	21	21	27	2.82	[illegible]	1.68	3.2	6	14	6	10	s.	U. S. Weather Bureau.
Tarkio	Atchison	976	5	42.2	2.1	71	5	15	[illegible]	21	2.40	1.10	[illegible]	6.0	6	17	6	7	sw.	John F. Frazier.
Trenton	Grundy	822	22	43.1	0.5	72	6	19	[illegible]	29	3.11	+1.78	1.69	2.0	8	11	5	11	s.	W. H. Estes.
Section means and extremes				43.2	+1.2	81	8	12	30	40	2.96	+1.26	4.01	4.7	6	15	4	11	nw.	
State means and extremes				44.9	+0.5	85	6	12	30	55	3.18	+0.79	7.80	1.2	6	15	4	11	nw	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in computing the section means.

[illegible] appearing in the table indicate number of days missing; for example, b represents two days, etc.

[illegible] ¹¹Received too late to be included in means and summaries. ‡Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. F. D. No. 1; of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for November, 1918.

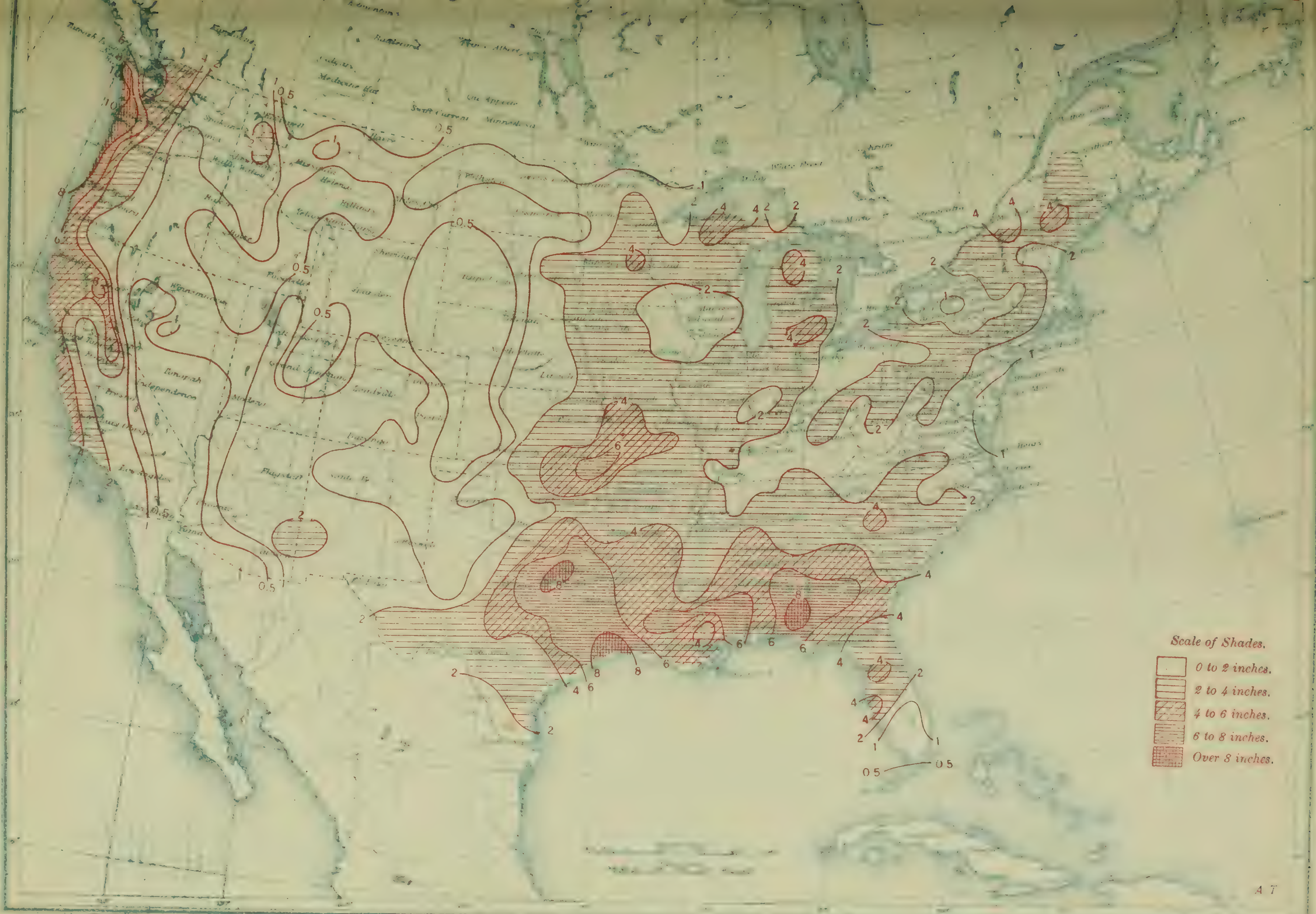
Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
[illegible] Prairie.																																	
[illegible]	Missouri							.61	.58							T	[illegible]	.12	.30					T.									[illegible]
[illegible]	Grand							.35	.75							.20		[illegible]	.12										1.03	.08			[illegible]
[illegible]	Chariton						.25	[illegible]	[illegible]							[illegible]	.05	.10	.12				T						1.00				[illegible]
[illegible]	Missouri				T.		.21	.86	[illegible]							.11	[illegible]	[illegible]	.03		T.	T.	T	T.	T.	T.			[illegible]				[illegible]
[illegible]	do						.25									.15	[illegible]	[illegible]										.18	[illegible]				[illegible]
[illegible]	do							[illegible]	[illegible]							[illegible]	.02	T.	[illegible]				T.	T					[illegible]				[illegible]
[illegible]	Meramec							[illegible]	[illegible]	[illegible]						.05	[illegible]	[illegible]	.10										1.11				[illegible]
[illegible]	Mississippi															[illegible]	[illegible]	.12					T						.65				[illegible]
[illegible]	do						[illegible]	[illegible]	.02							.07	.06	.05	[illegible]	T.	T	T.	T.	T.	T				1.12				[illegible]
[illegible]	Missouri							[illegible]	[illegible]	[illegible]						[illegible]	.27	[illegible]	.13				T.					.30	[illegible]				[illegible]
[illegible]	do							.71	[illegible]							[illegible]	[illegible]	.20	.18				T.						.59				3.11
[illegible]	Chariton							.82	[illegible]							[illegible]	.17	[illegible]											.98				[illegible]
[illegible]	Mississippi						.22	.03								[illegible]	.11	.05	.13		T		T						[illegible]				[illegible]
[illegible]	do							[illegible]	[illegible]							[illegible]	[illegible]	.05	.06		.03	T.	T.	.01					1.01				[illegible]
[illegible]	Chariton				.40			[illegible]									.27	[illegible]	[illegible]				T	T					1.10				[illegible]
[illegible]	Mississippi							[illegible]	.10														T						[illegible]	.16			[illegible]
[illegible]	Meramec							1.20	[illegible]								.11	T	[illegible]				T						1.75				[illegible]
[illegible]	do							[illegible]		[illegible]	[illegible]					.02	[illegible]	.25	[illegible]									T	[illegible]				[illegible]
[illegible]	Mississippi							[illegible]	[illegible]							[illegible]								T					[illegible]				[illegible]
[illegible]	Grand						.20	[illegible]								[illegible]	T	[illegible]	[illegible]		T		.02						[illegible]				2.22
[illegible]	Missouri							[illegible]	[illegible]	.02						[illegible]	T												[illegible]				[illegible]
[illegible]	Mississippi						[illegible]	[illegible]	[illegible]							[illegible]	[illegible]	.03	.04		T		T.	T					.56				[illegible]
[illegible]	do						.02	[illegible]	[illegible]							.16	.38	.03	.02			T.	T	T.				[illegible]	[illegible]				2.73
[illegible]	do							[illegible]									[illegible]	[illegible]		.20								[illegible]	[illegible]				[illegible]
[illegible]	do						T	[illegible]								.10	[illegible]				T		T.						[illegible]				[illegible]
[illegible]	Meramec							.22	[illegible]	.32						[illegible]	[illegible]	.07	.06										[illegible]				[illegible]
[illegible]	Grand							.20	.90								[illegible]	.15	.20	.06			T.	T					[illegible]				[illegible]
[illegible]	Meramec																												.90	.20			2.83
[illegible]	Mississippi	T.						[illegible]	[illegible]	.10						.13	[illegible]	.52	.08	T.			T.	T.	T.								
[illegible]	do						T.	[illegible]								.03	1.36	[illegible]	T.		T.	T.	T.						.60				3.98
																												[illegible]	.64				[illegible]
[illegible] Lowlands.																																	
[illegible]	Mississippi								[illegible]								[illegible]		.60														
[illegible]	do								T	[illegible]						T	[illegible]	.15	T.			.12				T.	T.		.90				2.90
[illegible]	Black							.12	[illegible]							[illegible]	.52	.25	T.										[illegible]				[illegible]
[illegible]	Mississippi								.50							.50		[illegible]				T.							.06				1.87
[illegible]	do								[illegible]								[illegible]	1.70										[illegible]					2.04
[illegible]	do								T.	[illegible]							[illegible]	.06	.14	.01			T						1.10				[illegible]
[illegible]	do								.40							[illegible]													1.05				[illegible]
[illegible]	Black							T.		[illegible]						[illegible]		[illegible]				T							[illegible]				1.99
[illegible]	Mississippi							T	.23	.02						[illegible]	[illegible]	[illegible]	T.			T.							1.35				3.03
																												[illegible]	.02				1.54
[illegible] Plateau.																																	
[illegible]	Gasconade								.40	.85							.11	.15	.04	T.													
[illegible]	Black																												.73				2.61
[illegible]	Osage															[illegible]	.24																
[illegible]	White								[illegible]	.70						.15			.34						[illegible]				[illegible]				[illegible]
[illegible]	Gasconade							[illegible]	[illegible]																				[illegible]			T	4.71
[illegible]	Neosho																																
[illegible]	Osage						[illegible]	[illegible]	3.14									[illegible]			T.					.10		[illegible]					
[illegible]	Black							.51	.32							.27	[illegible]		.25						T								8.02
[illegible]	Meramec							.04	1.14	T.						T	[illegible]	[illegible]					T						.96				[illegible]
[illegible]	Black							[illegible]	[illegible]							[illegible]	.20	.42	[illegible]						T				.64				[illegible]
[illegible]	White							[illegible]		.95						.50		.10											.70				[illegible]
[illegible]	Gasconade							[illegible]	.92								[illegible]		[illegible]										[illegible]				[illegible]
[illegible]	Mississippi							.91	.61							.21	.17	[illegible]					T.		T.			.50					[illegible]
[illegible]	Black							.48	[illegible]							[illegible]	.27	[illegible]								T.		T.	.66				[illegible]
[illegible]	Osage							1.20	1.00	.03						[illegible]	.10	.08	[illegible]						T				.97				2.82
[illegible]	do						[illegible]	[illegible]	1.03													T.			.10				[illegible]				1.12
[illegible]	White							.65	.70	.26						.04	.98	.18								T.			1.30				[illegible]
[illegible]	Neosho						.24	[illegible]	2.92							.15	.04	[illegible]			T	.08	T.	T	.05				[illegible]				[illegible]
[illegible]	Meramec						[illegible]	.58	.21							.43		.18	[illegible]				T.	T.	T			[illegible]	.72				[illegible]
[illegible]	White						.18	1.62	[illegible]						T	[illegible]	T	.07	[illegible]		.07		T.	T.	.04				.90				4.29
[illegible]	Meramec							1.20	[illegible]	.39							.50	.80	[illegible]									.52	[illegible]				[illegible]
[illegible]	Osage							.57	.83							.11	.15	.17	.27					T.	.03				.97				3.40
[illegible] Plain.																																	
[illegible]	Osage							1.18																									
[illegible]	do						.37	2.01	[illegible]							T.	T.	[illegible]					T.	T.	T				.71				
[illegible]	do															T.		T.	[illegible]			T.	T.	T.	.01			.04	.80				2.00
[illegible]	do						[illegible]	[illegible]											.22										.90				[illegible]
[illegible]	Neosho							.65	.57							T.	.05		.13						T.				.70				[illegible]
[illegible]	Missouri							4.60	.80							T.	T.												1.05				[illegible]
[illegible]	do						.55	[illegible]								T.	T	T.	.26			T.		T.					[illegible]				6.45
[illegible]	Osage						.35	.54								.10	T.	.12	.12				T.					T	1.10				3.19
[illegible]	do						.31	[illegible]										T.	.14				T.					.22	.72				2.63
[illegible]	Missouri							3.45	.60							.02	[illegible]		.16										.91	.03			4.77
[illegible]	Osage																																[illegible]
[illegible]	Missouri						T.	3.25			.04					[illegible]		.06	[illegible]				T	T				T	[illegible]				[illegible]
								.72	.73								[illegible]		.26				T.		T.	T.			.23	.73			[illegible]
[illegible] Plateau.																																	
[illegible]	Grand							1.80	.20							[illegible]					.50												
[illegible]	do						T.	1.17	.02								.25	.07	T.		T	T.	T.	T.				T.	1.00				3.70
[illegible]	do							.15	2.00								.20												[illegible]				[illegible]
[illegible]	Missouri							.93	[illegible]						T.	T.	.30	.05				T.	T	T				.11	[illegible]				[illegible]
[illegible]	Grand						.18	1.40	.12							.07	[illegible]	[illegible]	.03		T.		.01	T.				T.	1.10				1.74
[illegible]	do						T.	.85							T.		.51	.20				T.	T	T.	T.		T.		.78				[illegible]
[illegible]	Missouri						.69	2.74								.18		[illegible]				T.	.01	T.	.01			.25	.57				[illegible]
[illegible]	Grand							.90	[illegible]								[illegible]	[illegible]					T										1.61
[illegible]	Missouri							.48	1.21								.10		.07										[illegible]				[illegible]
[illegible]	do						.06	4.01									.22							T.					.82	[illegible]			2.76
[illegible]	do							.33	.59							[illegible]	.52	[illegible]	.17				T.	.05					1.01				[illegible]
[illegible]	do							1.00							T.		.46	.22				[illegible]	T	T.				T	.64	.03			2.55
[illegible]	do						.11	1.57							T.	[illegible]	T.	.10				T.	T.	T.				.31	[illegible]				2.16
[illegible]	do							.91								.05	.55	[illegible]	.06				T.						[illegible]				2.82
[illegible]	Grand						.20	1.69																					.60				[illegible]
															T.	.24	.05	.09				T.	.03	T.				.70	.44				3.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the
of observation. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch.
egular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate
of fall not recorded

Daily temperatures for November, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum	57	69	68	70	73	78	65	62	52	52	67	61	[illegible]	68	76	[illegible]	47	45	47	[illegible]	56	52	56	[illegible]	43	47	47	—	[illegible]	47	....
	Minimum	28	36	42	47	45	52	[illegible]	45	38	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Columbia	Maximum	51	69	67	69	72	77	[illegible]	[illegible]	47	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	27	41	42	39	50	58	57	46	38	[illegible]	[illegible]	31	[illegible]	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Fayette	Maximum	51	68	68	70	72	75	61	[illegible]	48	50	65	[illegible]	64	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	25	37	40	37	50	60	52	41	37	30	[illegible]	[illegible]	30	41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Hannibal	Maximum	51	67	66	64	68	76	62	60	48	50	58	58	62	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	28	38	[illegible]	33	48	55	47	47	[illegible]	[illegible]	31	[illegible]	35	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Jefferson City §§	Maximum	58	68	68	79	72	77	64	[illegible]	49	50	60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	27	28	[illegible]	40	41	49	57	48	[illegible]	29	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Kirksville	Maximum	51	64	62	65	70	76	73	63	52	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	21	[illegible]	49	36	47	54	56	42	35	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	17	[illegible]	[illegible]	[illegible]	[illegible]	....
Louisiana	Maximum	[illegible]	[illegible]	62	66	57	67	67	[illegible]	46	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	21	30	50	33	43	50	55	45	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Macon §§	Maximum	51	62	64	67	71	85	61	60	[illegible]	51	63	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	21	26	34	40	41	[illegible]	56	45	35	27	[illegible]	32	31	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Mexico §§	Maximum	53	70	71	[illegible]	72	76	67	57	47	[illegible]	[illegible]	[illegible]	62	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	30	20	40	35	36	43	56	47	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Oakfield	Maximum	55	76	71	71	70	77	69	59	53	52	60	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	28	46	46	45	[illegible]	52	53	49	30	52	[illegible]	35	51	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
St. Catharine	Maximum	50	62	69	66	76	75	65	64	[illegible]	52	60	[illegible]	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	21	35	50	[illegible]	50	59	56	42	35	26	43	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
St. Louis (1)	Maximum	50	66	69	66	66	75	64	60	52	49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	31	39	49	50	46	50	53	50	44	37	[illegible]	39	39	41	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Unionville	Maximum	56	64	62	[illegible]	70	75	64	56	50	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	25	21	35	35	36	50	50	[illegible]	26	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Warrenton §§	Maximum	55	69	65	67	70	77	61	[illegible]	47	53	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	28	31	38	36	42	43	55	52	38	30	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	22	22	27	[illegible]	26	22	....
Southeast Lowlands.																																
Caruthersville	Maximum	63	70	76	82	82	82	68	67	68	68	[illegible]	69	69	71	[illegible]	72	[illegible]	54	61	65	47	44	47	47	[illegible]	45	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	37	35	37	45	49	48	55	60	51	37	35	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	42	[illegible]	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Doniphan	Maximum	55	62	67	71	70	72	67	64	60	55	56	63	65	62	[illegible]	70	[illegible]	[illegible]	59	55	44	45	39	40	[illegible]	[illegible]	52	[illegible]	[illegible]	[illegible]	....
	Minimum	31	33	34	45	44	43	55	58	45	32	29	28	30	31	51	[illegible]	[illegible]	[illegible]	[illegible]	51	30	[illegible]	34	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Jackson	Maximum	58	68	78	78	72	78	69	64	63	55	59	70	67	70	60	70	[illegible]	[illegible]	[illegible]	47	49	[illegible]	41	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	28	29	34	38	56	38	51	57	41	28	26	24	25	27	48	50	[illegible]	41	[illegible]	[illegible]	36	[illegible]	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	....
Marble Hill	Maximum	70	64	70	73	74	74	75	70	77	59	69	68	75	81	68	65	68	[illegible]	68	59	43	[illegible]	[illegible]	48	42	45	52	[illegible]	[illegible]	49	....
	Minimum	20	31	39	42	38	39	35	39	40	36	29	26	31	29	49	[illegible]	[illegible]	[illegible]	46	[illegible]	32	[illegible]	[illegible]	27	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
Poplar Bluff	Maximum	55	60	64	72	75	75	76	78	[illegible]	55	65	67	67	70	58	71	[illegible]	[illegible]	62	[illegible]	47	42	42	43	42	45	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	30	30	32	31	42	44	42	53	50	33	31	38	40	31	54	56	[illegible]	43	42	[illegible]	36	35	[illegible]	31	31	[illegible]	[illegible]	[illegible]	[illegible]	23	....
Ozark Plateau.																																
Arcadia §§	Maximum	69	65	74	70	70	71	60	61	57	58	58	[illegible]	[illegible]	64	59	69	57	41	56	46	40	[illegible]	52	[illegible]	43	44	[illegible]	[illegible]	[illegible]	47	....
	Minimum	28	33	40	47	38	43	46	51	41	29	25	[illegible]	27	25	48	50	51	[illegible]	37	[illegible]	35	31	[illegible]	28	[illegible]	26	[illegible]	24	[illegible]	22	....
Birchtree	Maximum	59	64	72	75	....	....	68	58	58	56	61	....	....	....	52	68	62	46	57	52	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	28	36	41	40	....	....	46	52	38	30	29	....	....	....	34	48	46	28	36	[illegible]	[illegible]	[illegible]	29	28	[illegible]	28	[illegible]	[illegible]	[illegible]	24	....
Eldon	Maximum	58	71	58	67	65	75	61	61	51	55	67	49	65	66	[illegible]	68	59	44	55	[illegible]	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47	....
	Minimum	25	35	45	39	39	54	51	45	37	28	28	34	28	58	47	50	44	35	53	[illegible]	30	28	26	22	[illegible]	[illegible]	22	24	[illegible]	[illegible]	....
Farmington	Maximum	51	64	72	72	70	72	66	58	56	....	55	66	[illegible]	63	57	66	61	47	45	[illegible]	[illegible]	35	[illegible]	[illegible]	[illegible]	42	[illegible]	[illegible]	47	[illegible]	....
	Minimum	30	36	44	49	45	49	54	51	41	31	29	[illegible]	31	38	[illegible]	[illegible]	39	37	[illegible]	57	32	[illegible]	30	27	24	28	[illegible]	[illegible]	[illegible]	[illegible]	....
Gano	Maximum	57	57	73	74	71	76	79	58	53	52	60	64	[illegible]	67	61	[illegible]	61	46	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	[illegible]	41	[illegible]	[illegible]	44	[illegible]	....
	Minimum	26	37	45	47	45	64	52	49	36	28	29	32	[illegible]	43	49	49	[illegible]	33	33	27	30	[illegible]	27	[illegible]	21	24	[illegible]	[illegible]	24	[illegible]	....
Hollister	Maximum	68	74	78	78	71	78	76	74	71	70	72	74	70	72	70	[illegible]	[illegible]	71	68	66	64	62	58	[illegible]	52	54	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	30	32	38	40	42	[illegible]	38	56	51	42	40	52	36	[illegible]	36	34	[illegible]	40	30	[illegible]	50	36	54	32	[illegible]	32	[illegible]	[illegible]	[illegible]	[illegible]	....
Koshkonong	Maximum	57	65	63	72	72	75	65	60	59	56	59	62	[illegible]	60	57	70	65	50	59	50	43	57	36	39	38	36	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	32	37	43	46	46	50	54	51	41	35	32	34	36	40	[illegible]	52	48	40	35	35	36	31	31	[illegible]	27	[illegible]	[illegible]	[illegible]	[illegible]	25	....
Lebanon §§	Maximum	59	69	72	72	73	75	63	55	53	54	55	65	65	65	57	67	[illegible]	41	57	40	[illegible]	[illegible]	32	38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....
	Minimum	27	28	29	41	47	48	54	49	34	27	32	33	28	30	41	52	42	36	32	30	[illegible]	29	27	24	21	25	[illegible]	32	23	[illegible]	....
Mountain Grove §§	Maximum	62	67	71	69	71	74	58	53	51	53	61	66	61	63	58	67	46	51	53	47	[illegible]	31	[illegible]	34	41	43	[illegible]	[illegible]	[illegible]	46	....
	Minimum	27	30	41	46	46	48	46	49	36	29	30	32	35	32	26	39	42	[illegible]	38	31	[illegible]	29	[illegible]	27	24	26	[illegible]	31	[illegible]	23	....
Neosho	Maximum	63	70	72	75	75	76	70	65	56	61	67	63	70	66	60	70	63	52	56	52	41	[illegible]	[illegible]	[illegible]	39	45	50	32	[illegible]	47	....
	Minimum	26	36	36	43	47	57	56	47	34	28	30	32	25	40	49	53	41	37	28	27	33	31	29	26	25	22	25	32	[illegible]	19	....
Rolla	Maximum	60	70	72	75	73	72	71	72	53	57	64	64	66	66	65	69	66	46	57	55	48	34	32	31	42	47	[illegible]	[illegible]	[illegible]	46	....
	Minimum	39	39	45	47	51	51	51	37	37	31	31	31	32	32	14	51	44	28	25	34	32	[illegible]	29	[illegible]	[illegible]	[illegible]	27	[illegible]	25	21	....
Springfield	Maximum	57	68	68	70	71	73	63	56	50	55	62	61	61	63	55	[illegible]	54	46	51	40	33	32	30	[illegible]	37	[illegible]	47	[illegible]	[illegible]	[illegible]	....
	Minimum	31	42	49	53	51	56	54	41	46	36	39	41	39	45	49	54	38	37	33	32	[illegible]	28	28	26	25	[illegible]	[illegible]	29	27	25	....
Southwest Plain.																																
Amoret	Maximum	58	68	70	72	73	72	66	58	52	55	63	60	62	55	69	63	55	50	60	45	37	35	32	30	28	42	42	40	46	48	....
	Minimum	27	35	48	45	52	60	56	39	36	28	32	35	30	40	43	51	39	35	30	33	32	25	26	23	21	25	28	30	25	22	....
Appleton City	Maximum	59	68	69	74	75	72	66	61	53	57	65	61	64	67	59	67	58	50	56	50	37	[illegible]	33	30	39	46	[illegible]	42	49	48	....
	Minimum	28	38	51	49	53	61	57	44	39	33	36	35	34	42	52	54	43	39	33	36	24	32	28	25	23	27	28	22	25	25	....
Clinton	Maximum	60	65	70	71	72	71	67	65	60	58	69	60	66	69	58	70	61	56	57	49	56	[illegible]	56	[illegible]	41	47	[illegible]	40	[illegible]	48	....
	Minimum	25	40	40	45	46	46	57	44	40	28	41	35	39	40	50	54	41	40	33	35	23	28	28	23	22	25	25	26	24	22	....
Harrisonville §§	Maximum	56	62	67	71	71	73	65	57	53	51	64	59	60	63	57	69	49	49	53	46	[illegible]	[illegible]	31	[illegible]	[illegible]	41	42	[illegible]	[illegible]	46	....
	Minimum	26	40	41	45	52	52	57	41	37	28	31	28	30	30	43	[illegible]	41	38	31	34	31	31	28	27	18	24	22	27	24	25	....
Lamar §§	Maximum	63	72	75	76	76	74	68	62	61	60	68	64	67	68	58	69	56	51	55	42	35	34	[illegible]	34	40	47	[illegible]	40	45	48	....
	Minimum	27	40	48	50	50	58	56	45	38	29	36	35	31	43	41	52	46	36	29	31	31	31	28	25	24	28	27	[illegible]	22	21	....
Lamonte	Maximum	67	67	67	71	75	76	65	64	51	55	65	68	62	65	57	60	68	47	53	44	[illegible]	35	32	[illegible]	41	46	[illegible]	[illegible]	47	47	....
	Minimum	25	36	50	38	50	61	56	44	37	25	30	33	27	43	51	48	38	36	33	33	33	31	28	25	20	21	21	[illegible]	25	23	....
Marshall	Maximum	53	66	67	69	72	77	65	64	50	52	....	58	65	65	59	67	59	46	50	44	36	35	33	33	28	[illegible]	47	42	43	45	....
	Minimum	21	31	50	39	50	57	59	46	38	27	....	36	33	29	51	53	58	37	36	36	33	30	28	19	20	24	22	31	24	22	....
Warrensburg	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum	60	70	71	74	75	77	67	65	56	60	68	62	67	71	61	71	65	50	56	45	37	35	[illegible]	32	42	47	51	41	49	50	....
	Minimum	21	30	18	39	51	61	57	46	37	26	28	32	26	31	51	55	42	38	35	31	33	22	28	25	20	22	23	33	21	28	....
Northwest Plateau.																																
Chillicothe §§	Maximum	51	66	66	68	74	71	65	59	52	60	65	60	63	65	62	62	45	43	45	36	30	35	31	34	40	45	40	43	42	44	....
	Minimum	25	35	35	37	51	52	56	43	36	26	38	37	31	31	50	50	44	39	37	34	33	29	27	18	18	18	23	33	18	18	....
Grant City	Maximum	55	54	62	59	65	65	65	62	50	52	64	57	63	65	64	59	54	47	42	40	42	38	33	32	40	42	40	38	36	34	....
	Minimum	25	34	37	40	50	55	52	38	36	27	33	37	35	39	42	19	37	36	37	31	31	27	22	16	20	21	22	30	15	16	....
Kansas City	Maximum	58	67	65	71	73	70	64	57	52	52	65	59	61	65	56	63	50	48	51	40	36	[illegible]	32	26	38	42	40	[illegible]	40	46	....
	Minimum	33	44	52	48	56	61	45	42	40	36	44	45	43	48	52	50	38	37	37	35	33	28	25	23	26	30	30	32	26	27	....
Kidder §§	Maximum	54	68	65	68	72	72	65	58	52	53	65	58	62	63	57	67	42	48	50	37	35	33	30	33	42	42	43	56	36	42	....
	Minimum	28	39	48	44	52	59	58	42	33	34	35	40	38	42	53	53	42	38	37	34	32	30	26	20	23	23	23	32	18	20	....
Lexington §§	Maximum	56	68	67	70	74	72	65	58	52	55	65	60	62	66	55	65	46	48	54	38	35	34	30	33	40	45	42	36	43	43	....
	Minimum	27	37	49	43	51	60	59	43	37	27	32	39	32	44	43	51	46	38	35	35	23	30	28	19	22	23	25	32	25	24	....
Maryville §§	Maximum	55	63	61	67	72	70	60	58	49	51	64	56	62	64	54	57	42	45	41	35	31	31	27	32	37	42	39	33	32	42	....
	Minimum	24	25	39	42	44	51	46	33	33	25	24	35	32	32	42	49	39	34	33	31	29	25	21	14	14	16	17	22	15	12	....
Oregon	Maximum	53	64	60	67	72	69	65	57	49	52	63	56	59	63	57	58	51	46	48	39	36	34	30	30	35	40	40	36	34	38	....
	Minimum	27	39	40	44	54	60	44	34	33	29	40	37	34	44	50	50	35	33	32	32	29	25	20	15	18	30	23	25	15	16	....
St. Joseph	Maximum	57	67	63	69	71	70	61	58	50	51	65	58	62	65	57	61	49	48	50	39	36	32	29	32	36	42	41	36	36	41	....
	Minimum	31	42	41	44	57	57	44	40	34	27	42	41	36	49	53	49	37	[illegible]	36	34	31	28	22	21	24	22	27	28	21	22	....
Tarkio	Maximum	56	63	63	68	71	71	66	59	50	52	64	57	62	63	56	57	51	46	46	39	36	36	28	35	41	44	36	36	36	38	....
	Minimum	25	38	39	40	57	61	45	35	34	26	38	35	32	42	50	52	37	36	35	34	31	26	21	15	19	18	22	25	16	15	....
Trenton	Maximum	56	60	59	63	67	72	67	64	53	[illegible]	59	54	58	62	56	69	57	44	45	42	37	34	31	31	37	40	42	38	35	40	....
	Minimum	28	36	49	51	53	58	[illegible]	42	38	30	30	39	36	40	51	52	40	38	38	33	33	29	22	19	21	21	24	30	20	19	....

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is char
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
A 7

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR NOVEMBER, 1918, AT THE UNIVERSITY OF SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 85 and 86.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a.m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standar described in Circular L. Horizontal distance of the anemometer pan, 2 inches. Height of cups of anemometer above rim of p inches. The instrument shelter is 100 feet southeast of the pan; h of thermometers above ground, 11 feet. Distance of rain gage from 2.6 feet. The ground in the immediate vicinity of the pan slopes t north, average 5 per cent grade. The soil is covered by blue grass being part of the University campus. There are no bodies of water nor are there any irrigation projects under way nearby. The ge topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising o being George Reeder, Meteorologist and Section Director. The ob tions in the table herewith, were taken by M. Roy Weldon, Ass Observer, Weather Bureau. This is one of the "Class A" station signed to furnish practical information relative to evaporation. Fu complete climatic records have been made at Columbia, Mo., by Weather Bureau for about 29 years. These records are published b are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for November, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Daily evaporation	.005	.067	.067	.080	.060	.104	†.001	†.003	.063	.020	.038	.060	.049	.067	.053	†.004	.047	.093	.048	.036	.033	.008	.018	*.015	*.025	*.041	*.036	*.015	*.039	*.047	....
Daily wind movement	47	28	43	32	43	49	39	67	29	32	26	31	28	29	47	61	64	109	97	68	50	57	62	48	32	20	16	51	59	27	....

*Frozen; estimated from total in next following measurement. †Indicates minus (—) Observations taken at 7:45 a. m., 90th meridian time

OBSERVERS' REMARKS.

Gorin—There was considerable snow on the 28th, but it melted as fast as it fell.

Louisiana—Snow fell during the night of the 22d but melted before morning.

St. Catherine—November has been favorable for husking corn. From the 15th to the 23d there was continued cloudiness; the sun shone only for an instant during the entire time.

Unionville—Rain turned to snow on the 27th.

Warrenton—A fine month of Indian Summer up to the 18th, when it became cloudy for a spell and colder. Wheat is looking fine.

Jackson—This has been a very fine month.

Farmington—Beautiful fall weather up to the 15th. Latter part of the month typical November weather prevailed, being raw, cold, and cloudy, with much high winds.

Gano—The first killing frost of the season occurred on the 1st. The first sown wheat is looking fine. Corn mos gathered.

Lockwood—A very pleasant month; but most too wet corn husking. Wheat looks fine, and general condition is g Considerable plowing done.

Amoret—There was rain, snow, and sleet on the 28th. W is looking very good.

Appleton City—First part of the month was favorabl outdoor work, Indian Summer prevailing. Several heavy fr

Lamonte—Wheat is looking fine. Much fall plowing d Snow flurries on the 23d, and 28th.

Warsaw—Almost the entire month was ideal for everyth

Gallatin—A trace of snow was on the ground mornin the 22d.

Kidder—The past month was favorable for outdoor work heavy snow fell on the 27th and 28th. The month closed and cold.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

MISSOURI SECTION

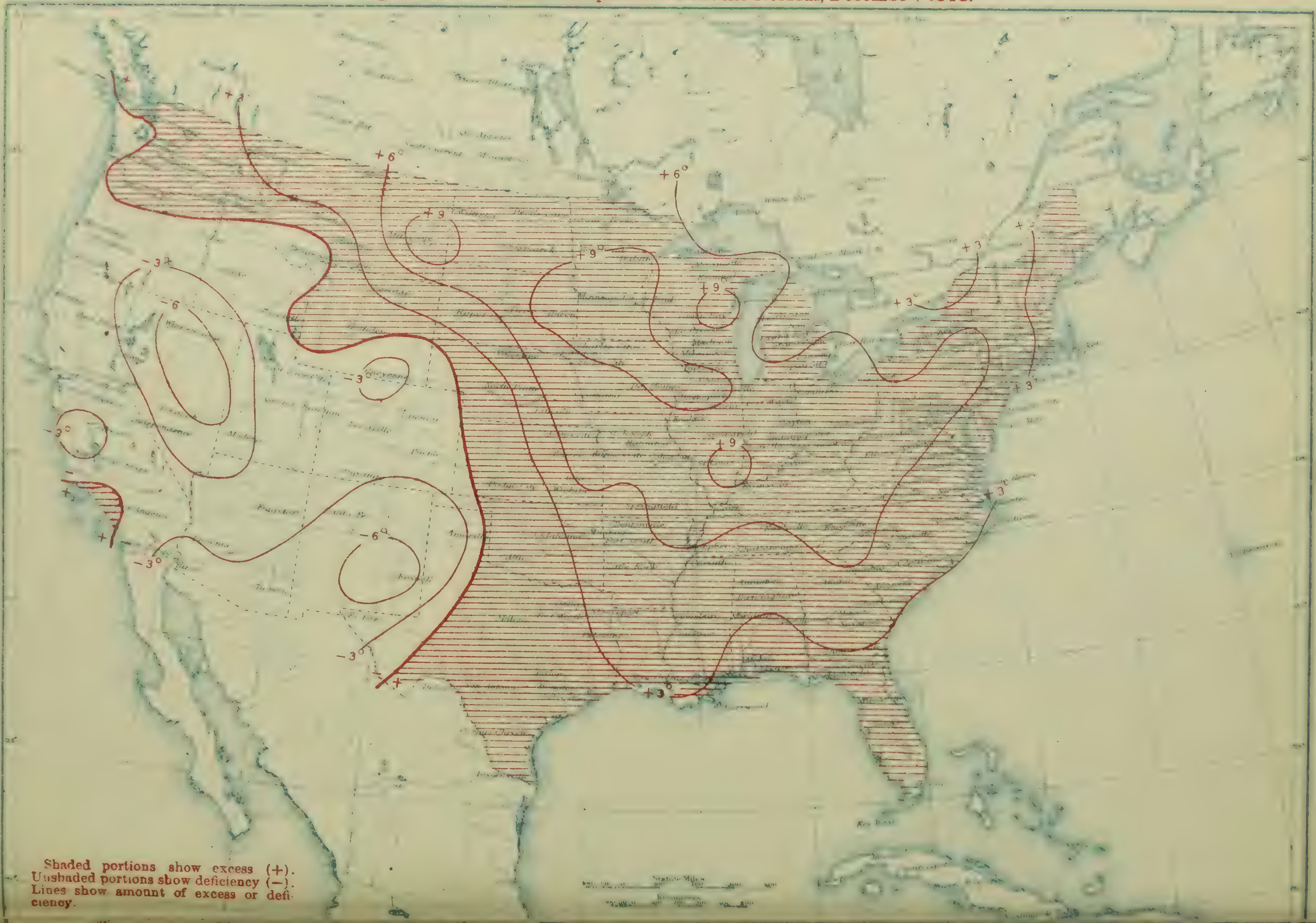
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

DECEMBER, 1918

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
JAN. 22, 1919.

Departure of the Mean Temperature from the Normal, December, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

Vol. XXII. Columbia, Mo., December, 1918. No. 12

GENERAL SUMMARY.

December, 1918, was much warmer and somewhat wetter than normal; and in these respects it stands in marked contrast with the same month in 1917. The first three weeks were, as a rule, unusually mild for winter; and were favorable for farm operations, except in the extreme Southeast where it was too wet for hauling cotton picking and gathering corn. The first general snow, and real cold snap, set in on the 23d and 24th and spread over the entire State. Temperatures recovered somewhat on the 29th and 30th but the month and the year ended with a cold wave, attended by sleet and snow. The western, central and northern sections were continuously covered with snow during the last week; the snow had drifted badly in places, and most traffic and business were more or less hindered; railroad trains ran behind schedule. The wheat crop prospects were probably never better at this season.

TEMPERATURE.

The monthly mean temperature for the State, 66 stations reporting, was 40.0°. The mean departure from the normal for 62 stations having 10 or more years' record was plus 6.6°. During the past 30 years only one December (1889) was warmer than the present month, but two other Decembers (1891 and 1901) were nearly as mild. The first three weeks were almost continuously mild but winter set in on the 23d and 24th, and by the 26th temperatures had fallen to zero at about 18 stations. Minimum temperatures were 32° or lower on an average of only 16 days, or about 9 days less than in December, 1917.

PRECIPITATION.

The average precipitation for the State, 81 stations reporting, was 3.21 inches. The departure from the normal for 69 stations having 10 or more years' record was plus 1.14 inches. This was the wettest December since 1895; and there was an excess in all divisions. During the first ten days precipitation was light; general and more or less heavy 12th to 14th, being excessive in the southeastern lowlands; general 20th to 24th, changing to sleet and snow, and local light snow continued up to the 28th; on the 31st there was a more or less general sleet storm.

Snow fell in all sections, the average for the State being 7.8 inches; in the southwestern plain and northwestern plateau the fall averaged more than 10 inches.

EVAPORATION.

The evaporation readings for December are shown on page 96. The freeze that set in on the 24th of November continued to the 3d of December, and the readings of the 1st, 2d, and 3d are estimated readings. From the 4th to the 23d the weather was relatively mild and open and readings were made daily. This is the first time we have succeeded in getting an appreciable evaporation record for December.

WIND.

The prevailing winds were from the southwest. The average hourly velocity, 8 stations equipped with anemometers reporting, was 9.9 miles, or about normal. Fresh to brisk winds occurred on the 23d and 24th during snowstorm, causing some drifting.

SUNSHINE AND CLOUDINESS.

The number of hours of sunshine was 152. This is about 52 per cent of the possible and 4 per cent above normal.

MISCELLANEOUS PHENOMENA.

Fogs—8th, 10th, 13th, 14th, 19th, 21st, 22d, 23d, and 31st.

Halos, solar—3d, 6th, 7th, 17th, 18th, and 19th. Lunar—11th, 16th, and 17th.

Sleet—1st, 23d, and 31st.

PRESSURE, HUMIDITY, SUNSHINE, AND WIND DATA.

Stations.	Mean barometric pressure (sea-level).	Mean relative humidity.		Sunshine.		Wind.				
		7 a. m.	7 p. m.	Total hours.	Percentage of possible.	Total movement, miles.	Average hourly velocity.	Max. velocity.		
								Miles per hour.	Direction.	Date.
Columbia	30.05	85	......	163	56	6,220	8.3	27	nw.	3
Hannibal	30.04	85	......	......	......	6,422	8.6	28	ne.	23
Kansas City	30.04	76	70	145	50	8,739	11.7	34	nw.	24
St. Joseph	30.03	82	75	138	47	6,293	8.5	29	nw.	24
St. Louis	30.05	80	70	151	51	10,086	13.6	40	nw.	24
Springfield	30.06	86	73	160	54	8,421	11.3	31	w.	2
Cairo, Ill	30.06	83	74	......	......	7,231	9.7	31	sw.	24
Keokuk, Iowa	30.06	83	74	158	54	5,639	7.6	30	nw	24

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.				Precipitation.				Number of Days.			
	Mean.	Departure.	Highest.	Lowest.	Mean.	Departure.	Greatest in 24 hours.	Total snowfall, unmelted.	With .01 inch or more.	Clear.	Partly Cloudy.	Cloudy.
1888	35.9	+1.7	70	0	2.29	+0.24	.....	.....	6	....	....	....
1889	46.8	+12.6	78	2	0.96	−1.09	.....	.....	5	....	....	....
1890	36.0	+1.8	76	−3	1.03	−1.02	.....	.....	3	....	....	....
1891	39.8	+5.6	72	−1	1.90	−0.15	.....	....	6	....	....	....
1892	29.4	−4.8	75	−22	2.38	+0.33	3.08	4.8	6	8	7	16
1893	35.2	+1.0	76	7	0.95	−1.10	2.95	2.7	5	11	11	9
1894	36.7	+2.5	75	−7	2.13	+0.08	3.01	1.3	5	14	8	9
1895	34.3	+0.1	69	−8	6.13	+4.08	6.95	3.4	8	9	8	14
1896	38.6	+4.4	79	−5	0.93	−1.12	2.25	T.	3	13	8	10
1897	29.3	−4.9	74	−14	2.80	+0.75	2.70	6.3	7	8	8	15
1898	28.7	−5.5	74	−20	1.69	−0.36	2.50	5.1	5	17	6	8
1899	30.4	−3.8	72	−13	2.11	+0.06	1.70	6.6	9	12	9	10
1900	35.6	+1.4	68	−3	0.69	−1.36	1.08	0.6	4	14	8	9
1901	28.5	−5.7	71	−29	2.93	+0.88	4.43	6.9	8	11	7	13
1902	30.7	−3.5	68	−7	2.91	+0.06	2.50	3.1	8	10	4	7
1903	30.2	−4.0	65	11	1.51	−0.54	1.80	2.3	5	16	7	8
1904	32.9	−1.3	75	−10	1.50	−0.55	1.55	6.0	5	16	7	8
1905	33.3	−0.9	66	−2	1.45	−0.60	2.24	1.7	4	18	6	7
1906	36.1	+1.9	73	0	2.27	+0.22	2.85	0.6	8	8	6	17
1907	37.7	+3.5	76	3	1.84	−0.21	1.78	3.7	7	11	7	13
1908	38.4	+4.2	80	−4	0.85	−1.20	1.35	T.	3	16	7	8
1909	24.9	−9.3	76	−17	2.86	+0.81	2.50	7.7	8	12	6	13
1910	31.2	−3.0	67	−5	1.25	−0.80	2.85	2.4	4	16	5	10
1911	36.7	+2.5	74	−11	2.80	+0.75	2.60	5.1	7	13	6	11
1912	36.5	+2.3	72	2	0.59	−1.46	0.91	0.6	3	19	5	7
1913	38.3	+4.9	74	−3	2.27	+0.19	2.25	6.6	7	9	4	18
1914	26.8	−7.1	68	−18	2.48	+0.31	2.30	6.6	9	7	5	19
1915	34.7	+1.3	84	−13	2.77	+0.55	3.20	7.8	6	12	6	13
1916	31.3	−2.3	82	−29	1.85	−0.29	3.40	4.4	6	15	6	20
1917	25.5	−8.7	82	−23	0.74	−1.40	2.51	7.3	5	11	7	13
1918	40.0	+6.6	83	−12	3.21	+1.14	5.50	7.8	7	13	6	12

SUPPLEMENTAL TABLE OF DATA.

Stations.	Length of record, years.	Precipitation, in inches.				No. of days.				Prevailing direction of wind.	Observers.
		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip., .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Arlington	15	2.98	+1.42	1.70	5.0	5	19	0	12	......	Wm. R. Bennett.
Boonville	41	1.72	−0.30	0.60	6.0	4	20	0	11	......	C. Randecker.
C. Girardeau	11	8.86	+5.74	4.30	T.	10	13	3	15	s	D. L. Albert.
Glencoe	1	2.98	....	0.96	0	6	18	0	13	......	L. M. Beard.
Hermann	44	2.07	+0.23	0.58	0.8	7	16	2	13	sw.	W. E. Crawford.
New Madrid	24	4.36	−0.03	1.90	0	10	10	5	16	se.	Miss Josie Smith.
Osceola	18	2.21	−0.69	0.70	0	7	13[b]	3[b]	13[b]	......	Wm. E. Mathews.
Pacific	1	2.67	....	0.87	T.	7	14	1	16	......	Mark Waters.
Steelville	16	2.94	+1.10	1.11	0	6	12	0	19	sw.	A. Kreamelmeyer.
Tuscumbia	1	2.67	....	1.08	T.	5	12	4	15	s.	C. B. Wright.
Union	1	2.67	....	0.86	0.2	10	11	5	15	......	J. Wm. Keller.
Valley Park	1	....	....	....	.. .	..	..	..	..	......	T. W. McNeese.
Waverly	3	1.53	....	0.70	7.5	7	17[a]	2[a]	11[a]	....	J. W. Cauthorn.

Climatological data for December, 1918.

Stations.	Counties.	Elevation, feet	Length of record, years	Temperature: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation: Total	Departure from the normal	Greatest in 24 hours	Total snowfall	Days with .01 or more	Clear	Partly cloudy	Cloudy	Prevailing direction of wind	Observers.
Northeast Plain.																				
Brunswick	Chariton	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14.0	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]
Clifton Hill	Randolph	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	Boone	[illegible]	27	[illegible]	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Howard	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	2.71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fulton	Callaway	[illegible]	13	[illegible]	+6.1	71	5	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9	[illegible]	6	[illegible]	[illegible]	[illegible]
Gorin	Scotland	[illegible]	[illegible]								[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Marion	[illegible]	24	[illegible]	[illegible]	[illegible]	9	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	10	[illegible]	[illegible]	[illegible]
Jefferson City	Cole	[illegible]	21	[illegible]	+5.2	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6	[illegible]	2	[illegible]	[illegible]	[illegible]
Keytesville ††	Chariton	[illegible]	4								[illegible]		[illegible]	7.0	6					[illegible]
Kirksville	Adair	[illegible]	25	[illegible]	[illegible]	[illegible]	5	1	[illegible]	[illegible]	[illegible]	[illegible]	1.01	[illegible]	9	11	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Pike	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	11	[illegible]	[illegible]	[illegible]	[illegible]
Macon	Macon	[illegible]	19	[illegible]	[illegible]	[illegible]	[illegible]	−1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	Audrain	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield ‡‡	Franklin	[illegible]	[illegible]	[illegible]	+7.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+1.12	0.74	1.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Palmyra ††	Marion	[illegible]	5	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catherine	Linn	850	4	[illegible]		[illegible]	5¹	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	12.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Charles	St. Charles	[illegible]	[illegible]	[illegible]	+7.1	71	9	12	[illegible]	[illegible]	[illegible]	−0.71	[illegible]	T.	6	9	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	St. Louis City	717	46	[illegible]	+7.5	71	9	11	[illegible]	[illegible]	[illegible]	+0.46	1.01	[illegible]	[illegible]	[illegible]	1	12	s.	[illegible]
St. Louis (2)	do.	[illegible]	5	[illegible]		71	9	14	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]
Shelbina ††	Shelby	779	25								2.21	[illegible]	[illegible]	12.0	4					[illegible]
Steffenville	Lewis	[illegible]	21	[illegible]	+8.5	[illegible]	9	12	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	9	11	[illegible]	[illegible]
Unionville	Putnam	1,072	24	[illegible]	+8.6	[illegible]	5	1	26	2	[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]	7	[illegible]	nw.	[illegible]
Warrenton	Warren	865	26	[illegible]	+7.1	70	5	5	[illegible]	40	2.11	[illegible]	[illegible]	1.5	[illegible]	7	[illegible]	10	[illegible]	[illegible]
Keokuk, Iowa	Lee, Ia.	574	16	[illegible]	[illegible]	[illegible]	9	6	[illegible]	29	2.10	[illegible]	[illegible]	[illegible]	10	7	[illegible]	14	[illegible]	[illegible]
Section means and	extremes			[illegible]	+7.2	71	9	[illegible]	[illegible]	40	[illegible]	+0.42	[illegible]	7.4	7	11	[illegible]	12	s.	
Southeast Lowlands.																				
Caruthersville	Pemiscot	220	26	49.1	+9.2	79	10	18	26	28	7.13	+3.46	[illegible]	T.	[illegible]	14	2	15	e.	[illegible]
Doniphan	Ripley	344	12	41.2	[illegible]	71	10	12	26	[illegible]	6.75	+3.47	[illegible]	[illegible]	7	[illegible]	5	[illegible]	sw.	[illegible]
Jackson	Cape Girardeau	458	26	[illegible]	+7.6	74	8¹	16	[illegible]	28	7.84	[illegible]	[illegible]	1.5	10	[illegible]	[illegible]	[illegible]	s.	[illegible]
Marble Hill	Bollinger	420	25	46.1	+10.2	83	6	15	23	47	[illegible]	[illegible]	[illegible]	[illegible]	2	9	10	12	s.	W. A. K[illegible]
Patton (near)	Bollinger	[illegible]	2								3.90		[illegible]	6	7					[illegible]
Poplar Bluff	Butler	[illegible]	13	45.5	+8.6	77	10	11	26	41	[illegible]	[illegible]	[illegible]	T.	10	11	6	14		[illegible]
Cairo, Ill.	Alexander, Ill.	359	11	45.8	[illegible]	71	[illegible]	18	26	52	6.12	[illegible]	2.29	T.	12	9	6	16	s.	U. S. Weather Bureau.
Section means and	extremes			[illegible]	+8.2	83	6	13	26	[illegible]	[illegible]	+3.51	[illegible]	0.2	9	12	5	14	s.	
Ozark Plateau.																				
Arcadia	Iron	925	39	41.8	+7.6	73	6¹	[illegible]	[illegible]	[illegible]	[illegible]	+1.22	[illegible]	0.1	9	11	8	12	w.	Arcadia College.
Birch Tree	Shannon	[illegible]	25	[illegible]	+7.8	74	9	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	18	1	12	s.	V. H. F[illegible]
Bolivar	Polk	1,071	[illegible]	41.6	+5.5	[illegible]	8	0	[illegible]	[illegible]	[illegible]	+0.59	[illegible]	7.0	7	11	6	11	sw.	[illegible]
Cassville	Barry	[illegible]	6	42.0		70	9	1	26	[illegible]	[illegible]	−0.39	[illegible]	6.5	5	17	6	8	n.	[illegible] Talbert.
Crocker	Pulaski	1,126	6																	Roy W. Reed.
Dean ‡‡	McDonald	[illegible]	18	41.2¹	+3.3	[illegible]	9	7	26	36	3.62	[illegible]	[illegible]	[illegible]	8	18	2	11	w.	H. E. Dean.
Eldon	Miller	[illegible]	16	[illegible]	[illegible]	70	5	−3	[illegible]	[illegible]	[illegible]	+0.04	[illegible]	9.1	7	8	17	[illegible]	[illegible]	E. L. [illegible]
Farmington	Reynolds	918	3	43.0	[illegible]	72	[illegible]	13	26	[illegible]	[illegible]	[illegible]	1.94	[illegible]	10	16	[illegible]	[illegible]	sw.	[illegible]
Gano ‡‡	Dent	1,250	13	41.9	[illegible]	72	8	7	26	34	3.87	+1.87	[illegible]	1.2	9	16	6	9	nw.	A. C. [illegible]
Goodland	Iron	[illegible]	12	41.0	[illegible]	[illegible]	[illegible]	7	26	51	[illegible]	+1.41	1.62	0	6	11	10	10	n.	F. M. [illegible]
Hollister	Taney	735	[illegible]	[illegible]	[illegible]	78	10	18	27	[illegible]	[illegible]	+3.00	1.30	1.5	6	21	0	10	sw.	W. P. [illegible]
Houston	Texas	1,280	24	[illegible]	+8.3	77	10	9	26	[illegible]	4.13	+1.89	1.45	0.5	9	[illegible]	5	10	se.	R. F. [illegible]
Koshkonong	Oregon	[illegible]	16	[illegible]	[illegible]	74	9	11	26	[illegible]	6.37	+3.11	[illegible]	0	8	15	4	12	sw.	R. M. [illegible]
Lebanon	Laclede	1,265	28	40.0	+4.6	79	5	2	[illegible]	51	2.69	[illegible]	1.19	5.5	4	12	10	9	s.	[illegible] E. Dickerso
Lockwood	Dade	[illegible]	[illegible]	40.4	+4.5	[illegible]	8	3	[illegible]	[illegible]	[illegible]	−1.17	1.10	[illegible]	6	17	0	14	sw.	C. S. Crow.
Mountain Grove	Wright	1,490	18	[illegible]	+6.2	70	9	7	26	37	4.49	−2.21	1.90	T.	5	11	7	13	nw.	Mo. Fruit Exp. Sta.
Neosho	Newton	[illegible]	31	42.0	+5.3	70	8	−1	[illegible]	[illegible]	[illegible]	[illegible]	0.71	3.0	8	17	3	11	sw.	W. O. Buck.
Rolla	Phelps	1,139	35	42.4	+8.9	72	5	5	[illegible]	[illegible]	[illegible]	+1.24	0.86	6.0	10	11	6	11	w.	Prof. [illegible] G. Harris
Springfield	Greene	1,350	29	41.3	[illegible]	[illegible]	8	9	26	29	2.97	+0.30	1.29	4.9	10	16	3	12	se.	U. S. Weather Bureau
Section means and	extremes			42.2	+6.3	80	9	−3	25	51	3.71	+1.22	3.40	3.6	7	14	6	11	sw.	
Southwest Plain.																				
Amoret	Bates	831	8	[illegible]	+4.7	70	8	−6	26	[illegible]	[illegible]	+1.63	0.92	10.0	7	14	8	9	s.	Darby Fruit Farm.
Appleton City	St. Clair	873	26	40.3	+6.0	69	8	−3	26	[illegible]	2.54	+0.80	0.83	9.0	6	13	9	9	sw.	W. G. Bigelow.
Clinton	Henry	[illegible]	30	40.2	+5.6	72	8	5	25	34	2.25	+0.44	0.70	12.0	4	15	8	8	sw.	A. E. [illegible], M. D.
Harrisonville ††	Cass	[illegible]	14	[illegible]	+5.2	[illegible]	8	0	25¹	[illegible]	2.15	+0.29	[illegible]	8.0	7	9	10	12	sw.	A. J. Sharp.
Lamar	Barton	[illegible]	36	40.6	+5.1	71	8	0	26	[illegible]	3.68	+1.72	2.00	8.0	6	15	5	11	s.	Joe W. Springer.
Lamonte	Pettis	[illegible]	28	38.1	+3.0	70	8	−5	26	32	3.36	+1.64	1.00	7.0	7	10	11	10	sw.	J. Ed. Hall.
Marshall	Saline	779	26	37.5	[illegible]	65	8	−4	26	[illegible]	2.20	+0.48	[illegible]	9.5	8	11	8	12	se.	Dr. W. H. Black.
Nevada ††	Vernon	860	23	[illegible]	+6.5	71	8	2	26	[illegible]	3.10	+1.18	[illegible]	12.0	5	14	7	10	s.	George A. Kamp.
Warrensburg	Johnson	[illegible]	38																	Geo. H. Collins.
Warsaw	Benton	715	12	40.1	[illegible]	73	8	−12	26	[illegible]	3.58	+1.14	1.50	15.0	7	13	10	8	w.	J. R. Smith, M. D.
Section means and	extremes			39.4	+5.2	73	8	12	26	[illegible]	3.01	[illegible]	2.00	10.3	6	13	8	10	sw.	
Northwest Plateau.																				
[illegible]	Livingston	730	31	39.2	+6.8	62	5	6	26	22	3.53	+2.01	1.89	21.0	6	18	1	12	nw.	F. G. Ashbaugh.
[illegible]	Harrison	916	27	[illegible]	+4.5	60	9	2	25¹	27	[illegible]	[illegible]	0.60	9.0	6	10	7	14	nw.	M. H. Moulton.
[illegible]	Livingston	[illegible]	1	40.1	[illegible]	[illegible]	5	20	26	[illegible]	[illegible]	+2.25	2.04	11.0	5	11	10	10	sw.	R. L. [illegible]
[illegible]	Nodaway	[illegible]	32	35.6	[illegible]	62	9	0	25	27	1.71	+0.64	0.70	5.5	6	8	10	13	nw	Fr. Adelhelm Hess.
[illegible]	[illegible]	[illegible]	17								2.16	+0.61	1.00	12.0	6	14	6	11	nw.	Robert R. Wynne, Jr.
[illegible]	Worth	1,134	[illegible]	[illegible]	[illegible]	[illegible]	8¹	1	24¹	26	1.82	[illegible]	0.70	8.0	5	11	2	18	sw.	W. H. Campbell.
[illegible]	Jackson	963	28	[illegible]	[illegible]	[illegible]	8	6	25	25	[illegible]	+1.62	1.10	16.4	9	12	5	14	s.	U. S. Weather Bureau.
[illegible]	Caldwell	[illegible]	[illegible]	38.0	[illegible]	70	5	9	25¹	[illegible]	2.37	+0.95	0.72	12.0	5	12	9	10	sw.	J. F. Sharp.
[illegible]	Lafayette	[illegible]	[illegible]	[illegible]	[illegible]	65	6¹	6	26	30	1.76	0.05	0.95	8.0	4	17	0	14	s.	J. W. Keithley.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	16	−1	26	27	[illegible]	+2.18	1.53	18.5	6	9¹	0¹	13¹	n.	W. C. Wilmott.
[illegible]	Nodaway	[illegible]	26	[illegible]	+6.4	69	8	−3	25	31	[illegible]	+0.29	[illegible]	5.0	6	9	3	19	n.	J. R. Brink.
[illegible]	Holt	[illegible]	61	[illegible]	+6.4	61	5¹	−2	25	31	[illegible]	[illegible]	[illegible]	12.0	4	14	3	14	nw.	Tom Curry.
[illegible]	Buchanan	[illegible]	[illegible]	[illegible]		63	8	3	25	25	1.97	[illegible]	0.65	8.7	7	10	10	11	nw.	U. S. Weather Bureau.
[illegible]	Atchison	[illegible]	5	[illegible]	+10.0	61	5¹	0	25	30	[illegible]	+0.88	[illegible]	3.0	4	17	3	11	sw.	John F. Frazier.
[illegible]	Grundy	[illegible]	22	[illegible]	+6.1	58	8¹	5	[illegible]	27	2.39	+0.85	0.83	11.0	6	12	7	12	s.	W. H. Estes.
Section means and	extremes			36.6	+6.4	70	5	−3	25¹	36	2.41	+1.00	2.04	10.9	6	13	5	13	nw.	
State means and	extremes			40.9	+6.6	83	6	−12	26	51	3.21	+1.11	5.50	7.8	7	13	6	12	sw.	

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete report[illegible] [illegible]

[illegible] appearing [illegible] the table indicate number of days missing; for example, ² represents two days, etc.

[illegible] †† Record [illegible] included in means and summaries. ‡‡ Post-office addresses of these stations are as follows: of Oakfield, Pacific, R. [illegible] No. 1, of Dean, Anderson; of Gano, Salem, R. F. D. No. 5; of Mount Vernon, Aurora, R. F. D. No. 1.

Daily precipitation for December, 1918.

Stations.	Watersheds.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pr																																	
	Missouri									T.				[illegible]	.38							.26			.60	T.	T.		T.				1.72
	Grand									T.			T.	.23	[illegible]						[illegible]			.16	.56								1.74
	Chariton									T.			[illegible]	.30	[illegible]						[illegible]			T.	1.10			T.					2.57
	Missouri	T.		T.								.13							T.	.09			T.	[illegible]	[illegible]	T.	.12	.72				T.	1.99
	do												[illegible]	[illegible]							[illegible]				[illegible]								2.71
	do												[illegible]	[illegible]	.16				[illegible]		.27	.06	.02	T.	[illegible]		T.	T.				[illegible]	[illegible]
	Meramec									T.				[illegible]	[illegible]	.09						[illegible]	.04		[illegible]							.31	[illegible]
	Mississippi												.34	.33							[illegible]				.26								1.25
	do	T.	T.							T.			.19	.31	.04						[illegible]	.12		.17	.16	T.	T.	.01	T.			[illegible]	1.79
	Missouri									.02				[illegible]	.50						T.	[illegible]			[illegible]	T.	T.	T.	.01			[illegible]	[illegible]
	do									.08				.60	[illegible]							[illegible]			[illegible]			T.					[illegible]
	Chariton									.02			.33	.37						[illegible]	.27				.80								[illegible]
	Mississippi	1.01											.33	[illegible]	.13						[illegible]	.62		T.	.72			.30					[illegible]
	do		T.							.02			.01	.60	[illegible]						[illegible]	[illegible]	.02		[illegible]			.05	T.			[illegible]	[illegible]
	Chariton									.01					[illegible]							[illegible]			[illegible]	[illegible]							[illegible]
	Mississippi														[illegible]						T.			.75	[illegible]								1.78
	Meramec									.18			.47	[illegible]	.48						.11	.30		.03	.52	T.	T.	.02	T.			[illegible]	3.23
	do									.17				[illegible]	.80	.04					T.	[illegible]	.04		[illegible]			T.	T.				2.67
	Mississippi													[illegible]	.30							[illegible]			.72	.12		T.	T.				1.75
	Grand									T.			.30	[illegible]	[illegible]						.18	T.		T.	1.65							.35	2.23
	Missouri									.09			T.	T.	.21						.05	.09			.67	T.	T.		T.			.70	1.21
	Mississippi									.10			.65	[illegible]	[illegible]					.02	.22	.22		.27	.22	T.		.02	T.			.36	2.69
	do									.12			.66	.54	[illegible]						.51	[illegible]		.37	.22	T.		.05	T.			.35	3.08
	do											[illegible]	.35	.22								.20		1.16									2.21
	do	T.								.02			.35	[illegible]							.35			.90	.80			.07				.28	3.27
	Meramec									.13				[illegible]	.65	.15					[illegible]	.36	.01		.52	.01			.02				2.67
	Grand												.40	.30							.30			.85			T.	T.				.40	2.25
	Meramec																																
	Mississippi									.05				.52	[illegible]						T.	.42	.01		.75	.01	T.		.03				2.44
Iowa	do	.01	T.							.04			.31	.24	.01						.15	.03		.20	.78	T.	T.	T.	T.			.33	2.10
lands.																																	
	Mississippi									.15				[illegible]	2.20	.05					.40	.70	.25		.50		T.		.01			.76	8.86
	do									.05	.50		.55	[illegible]	[illegible]					T.	[illegible]	.12	T.	T.	[illegible]	T.					.13	3.70	[illegible]
	Black												.50	[illegible]							[illegible]	[illegible]		.10	.23							[illegible]	6.75
	Mississippi												.50	5.50							.48	.42		.25		.07		.12		.05	.25	.20	7.84
	do										.20		.40	2.80	.15						.90	.20		.30								[illegible]	5.75
	do										.11	T.		1.90	.89	.01					.30	[illegible]	.13		.40	.01						.10	[illegible]
	do												.50	1.00	.70					.10	1.10										.30	.20	3.90
	Black									[illegible]			[illegible]	[illegible]	.19					T.	[illegible]	.78		.11	[illegible]	T.		T.			.04	1.26	[illegible]
	Mississippi									.52	.02		1.18	1.02	.05					.10	.47	.20	T.	.13	.06	T.		T.			.59	1.78	6.12
	Gasconade							T.	T.	T.	.01			2.45	.62						.05	.67	.06		.39	T.	T.		.01			.01	4.27
	Black													1.70	.78	T.								.20	.20					.10			2.98
	Osage												.60	1.97							.22	.11		.41	.15							.75	4.21
	White												.76	.66	.20						.30	T.		.31	.34							.56	3.13
	Gasconade												.10	1.00							[illegible]			.59	.15	T.		T.				T.	2.20
	Neosho																																
	Osage												.58	[illegible]	.10				.01		.26		.50	.52								.46	3.02
	Black												.81	[illegible]	.10						[illegible]			T.	[illegible]	[illegible]						.21	2.47
ton	Meramec									.20			.70	[illegible]	.10						[illegible]	.27	T.					.08	T.	T.	.43	.03	4.44
	Black								.11				.73	1.27	.15						[illegible]	.32		.12	.45			T.				.58	3.87
	White									.72			.52	1.62	.16						.47											.46	3.95
	Gasconade												1.10	1.30	[illegible]									.60						.30	1.30		4.13
	Mississippi									.20			.78	[illegible]	T.						[illegible]	.22		.22	.31			T.				.62	4.78
	Black									.07			.65	[illegible]							[illegible]	.25		.24	.11							1.05	6.37
	Osage												T.	[illegible]	.55						T.	.30			.55								[illegible]
	do												1.10	[illegible]					T.		.58			.55	[illegible]							.37	3.16
	White									.42				1.90	.47	T.					T.	.83			.37	T.						T.	4.49
	Neosho												.51	.48	.12				.02		[illegible]			.65	.12			T.				.71	3.02
	Meramec									.03			.32	.86	.32						.37	.55		T.	.70		.15	.20				.45	[illegible]
	White	T.								.01			.83	.62	.13						.31			.41	[illegible]	.01		.02				.58	2.97
	Meramec									.28				1.11	.67							.37			[illegible]				[illegible]				2.94
	Osage									.33			T.	1.08	.35						T.	.31			.62	T.	T.	T.	T.				2.67
est Plain.																																	
	Osage	T.											.47	.26					.09		.92			[illegible]	.70							.45	3.37
City	do	T.												.83	.11				T.		.47			.50	.57			T.				.66	2.54
	do												[illegible]	.70											[illegible]							.50	[illegible]
	do									.02			[illegible]	[illegible]	.15						.59	.03			.84								2.15
	Neosho									.09			.07	.97	.09						.36				2.00								3.68
	Missouri												.48	.15	.17				T.		.23			.40	1.00		T.	T.	T.			.60	3.36
	do	T.											.33	.40	.17				T.	.20	.05		T.	.05	.90	T.	T.	T.				.10	2.20
	Osage												.63	.20					.33		.50			1.35								T.	3.10
	do												.13	.66	.31					.07	.22	.12			.70								2.21
burg	Missouri																																
	Osage									.07			.75	.50	.18					T.	.23				1.50	T.		T.				[illegible]	3.58
	Missouri									.02				.42	.17					T.	.03	.15			.70	.04			T.				1.53
Plateau.																																	
	Grand												.50	[illegible]	[illegible]						.25				1.89							[illegible]	3.53
	do	T.											.22	.59	.05						[illegible]			T.	[illegible]	T.	T.	T.				.30	1.94
	do													[illegible]	[illegible]						2.04				1.20		.20						4.19
	Missouri												[illegible]	.70					T.	T.	.13	T.		.67	.23							.36	1.71
	Grand	T.								.01			.25	.50	T.				T.		.20			T.	1.00			T.				.20	2.16
	do	T.							T.	T.				.70	.08				T.		.23		T.			.41			T.	T.	T.	.40	1.82
	Missouri	T.							T.				[illegible]	.41					.07		[illegible]			.66	.11		.01	.01				.56	2.98
	Grand													.55		.20					.20				T.	.72						.67	2.37
	Missouri													.47	.09							.25			.95								1.76
	do												.50	.76					T.		.35			T.	1.53			.05				.54	3.67
	do													.16	.50					.05		.18			.41	.12			T.				1.45
	do													.92					T.		.20				.70			T.				.55	2.37
	do	T.											.33	.55					.03		.18			.56	.02		T.	T.				.30	1.97
	do													1.20					.07		.30			.30									1.87
	Grand	T.											.35	.53					T.	.06	.23			.83	T.			T.				.39	2.39

cept as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the d observation. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. T. Trace, or less than 0.01 inch. ular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. **Precipitation in the next following measurement. ‡ Separate of fall not recorded

Daily temperatures for December, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Northeast Plain.																																
Brunswick §§	Maximum...	41	39	55	55	64	44	62	64	[illegible]	[illegible]	53	[illegible]	[illegible]	50	[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	42	13	[illegible]
	Minimum...	23	27	29	28	31	[illegible]	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	11	[illegible]	[illegible]	[illegible]
Columbia	Maximum...	47	49	52	53	65	[illegible]	65	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	33	30	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	Maximum...	42	48	[illegible]	[illegible]	64	43	[illegible]	64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	30	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	Maximum...	46	48	51	49	64	44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	33	29	31	30	33	29	[illegible]	49	44	40	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City §§	Maximum...	47	49	51	[illegible]	68	48	66	65	66	[illegible]	[illegible]	[illegible]	[illegible]	46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	21	29	32	28	33	30	30	46	34	36	29	31	[illegible]	40	29	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	Maximum...	39	45	51	51	60	51	59	59	59	51	50	39	40	45	54	[illegible]	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	29	25	35	27	34	26	36	40	[illegible]	33	27	31	[illegible]	31	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	Maximum...	43	47	54	50	64	60	62	62	68	65	60	46	45	46	52	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	27	28	28	28	32	28	36	45	35	33	35	36	40	40	42	26	[illegible]	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon §§	Maximum...	42	47	51	[illegible]	61	45	61	[illegible]	61	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	20	26	26	26	27	33	27	[illegible]	33	33	26	26	37	35	28	29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico §§	Maximum...	45	50	57	62	66	45	64	66	67	59	52	43	43	47	55	59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	23	26	29	28	30	28	28	42	50	36	29	30	38	[illegible]	28	32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	24	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	Maximum...	54	52	54	53	72	61	65	72	74	68	51	44	44	47	53	58	56	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	31	29	40	29	34	29	40	55	59	46	31	28	40	39	25	35	38	34	[illegible]	43	[illegible]	[illegible]	[illegible]	22	18	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catharine	Maximum...	40	45	50	50	60	55	58	59	60	52	49	45	40	47	53	50	51	52	[illegible]	49	[illegible]	49	[illegible]	[illegible]	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	25	25	36	27	33	26	36	40	50	32	26	32	36	30	20	[illegible]	[illegible]	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (1)	Maximum...	52	50	53	49	71	47	62	68	74	64	55	47	47	46	50	58	54	54	55	[illegible]	[illegible]	50	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	33	33	36	32	34	33	43	56	58	44	37	40	43	40	35	40	44	39	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	Maximum...	38	47	50	52	58	48	58	50	58	50	48	46	44	46	54	56	54	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	30	34	34	28	32	24	35	38	40	32	26	34	34	28	29	30	34	35	[illegible]	[illegible]	42	[illegible]	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton §§	Maximum...	48	50	53	51	70	45	65	69	70	63	53	43	42	48	55	59	55	51	[illegible]	[illegible]	60	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Minimum...	23	28	29	29	30	29	28	41	52	42	31	31	38	39	29	30	35	33	[illegible]	[illegible]	44	[illegible]	[illegible]	29	18	5	7	[illegible]	[illegible]	22	[illegible]
Southeast Lowlands.																																
Caruthersville	Maximum...	56	58	57	62	74	62	72	74	67	79	66	60	68	58	58	53	63	65	62	53	60	65	[illegible]	52	35	30	44	[illegible]	[illegible]	40	[illegible]
	Minimum...	26	35	35	32	36	42	42	60	62	69	41	47	56	45	35	31	46	40	42	47	52	[illegible]	[illegible]	33	20	18	21	[illegible]	[illegible]	47	48
Doniphan	Maximum...	50	54	60	58	68	57	66	70	69	71	56	49	61	55	58	57	57	58	48	54	60	55	50	42	[illegible]	[illegible]	[illegible]	36	48	48	40
	Minimum...	21	32	35	37	29	34	33	58	69	55	33	38	49	44	28	28	28	36	38	43	44	24	31	29	[illegible]	[illegible]	25	21	[illegible]	[illegible]	[illegible]
Jackson	Maximum...	52	54	52	57	70	70	70	74	67	74	61	62	61	51	57	51	57	60	55	57	56	60	50	48	[illegible]	[illegible]	[illegible]	31	44	43	48
	Minimum...	21	29	28	24	32	35	39	54	38	51	32	30	47	43	30	28	22	30	35	44	50	40	37	28	27	17	27	23	[illegible]	32	[illegible]
Marble Hill	Maximum...	45	60	58	59	72	83	70	73	82	73	76	56	79	55	55	60	60	59	63	55	57	59	44	52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	[illegible]
	Minimum...	37	30	32	27	35	36	46	60	60	60	33	33	45	42	30	32	30	32	32	40	37	37	38	31	25	15	27	22	19	25	[illegible]
Poplar Bluff	Maximum...	54	58	57	59	71	56	66	71	70	77	64	49	61	56	56	62	59	61	49	57	59	59	47	47	30	36	[illegible]	[illegible]	52	47	[illegible]
	Minimum...	22	32	37	39	30	41	34	56	60	57	34	38	48	43	30	31	38	36	33	44	48	36	[illegible]	29	[illegible]	11	[illegible]	[illegible]	22	[illegible]	[illegible]
Ozark Plateau.																																
Arcadia §§	Maximum...	51	53	51	59	73	51	61	69	73	68	58	58	54	44	57	59	59	58	50	53	60	51	46	58	26	34	[illegible]	[illegible]	[illegible]	47	[illegible]
	Minimum...	25	28	30	27	28	34	35	45	53	50	35	30	41	42	29	26	26	31	30	35	47	33	33	34	[illegible]	11	12	19	[illegible]	[illegible]	[illegible]
Birchtree	Maximum...	51	51	58	56	71	61	66	70	71	68	58	53	57	52	53	56	60	57	48	51	61	55	40	34	27	35	[illegible]	36	52	59	47
	Minimum...	39	28	36	28	36	36	38	52	60	54	36	39	43	40	28	32	32	32	37	40	50	36	53	[illegible]	17	8	25	19	[illegible]	34	33
Eldon	Maximum...	52	65	53	59	70	63	57	68	65	59	58	45	42	50	60	61	60	60	50	54	51	47	40	32	21	25	24	25	[illegible]	45	[illegible]
	Minimum...	28	26	38	27	37	38	39	40	50	43	27	35	37	36	27	30	32	30	40	40	27	37	28	21	6	−3	15	11	11	32	12
Farmington	Maximum...	50	54	56	56	71	71	64	70	72	66	61	49	52	48	51	57	54	61	52	55	58	54	52	40	28	[illegible]	[illegible]	[illegible]	49	42	[illegible]
	Minimum...	30	31	40	31	34	31	39	44	50	46	34	27	41	40	31	31	36	35	36	44	50	40	31	24	29	13	27	[illegible]	21	34	18
Gano	Maximum...	52	50	50	56	71	61	62	72	72	63	55	48	52	51	52	61	61	55	51	52	58	51	56	31	31	33	[illegible]	[illegible]	49	52	48
	Minimum...	27	27	36	28	37	31	41	57	55	41	29	34	39	36	37	31	35	34	36	40	45	35	30	20	16	7	24	16	19	24	29
Hollister	Maximum...	42	40	56	62	67	71	72	73	75	78	76	74	72	70	64	62	72	76	64	64	68	63	60	[illegible]	28	36	40	42	40	41	[illegible]
	Minimum...	26	34	38	37	38	40	44	45	45	44	42	46	44	42	30	26	32	36	56	54	38	26	34	30	28	22	18	34	[illegible]	34	[illegible]
Koshkonong	Maximum...	52	55	60	64	71	60	69	70	74	70	59	47	57	54	56	62	60	56	48	52	61	52	[illegible]	39	27	37	[illegible]	[illegible]	56	46	48
	Minimum...	29	30	37	33	38	40	40	54	61	55	32	40	45	42	32	29	38	37	37	41	51	40	32	25	20	11	[illegible]	25	[illegible]	34	34
Lebanon §§	Maximum...	49	53	55	68	79	59	67	76	69	64	55	45	51	53	60	60	39	59	48	47	60	37	31	27	20	29	42	45	50	50	31
	Minimum...	23	24	21	28	28	33	32	50	56	57	36	28	38	38	33	25	34	34	35	34	42	23	[illegible]	24	14	2	7	14	17	[illegible]	29
Mountain Grove §§	Maximum...	44	48	56	63	69	63	64	68	70	63	53	51	51	47	57	58	59	57	48	53	57	42	34	32	20	56	29	34	53	46	32
	Minimum...	25	28	32	28	32	36	41	49	51	46	29	30	36	35	29	30	36	36	36	37	42	31	33	32	17	7	11	13	22	29	31
Neosho	Maximum...	50	53	56	66	69	63	68	70	68	60	55	51	53	50	59	61	60	54	53	61	60	55	36	34	23	34	35	30	51	58	51
	Minimum...	29	28	38	28	41	33	48	55	49	33	24	33	42	35	25	30	30	37	38	42	36	30	20	21	12	−1	18	12	18	40	25
Rolla	Maximum...	51	51	50	60	72	63	66	71	71	65	57	50	50	48	58	62	62	56	52	53	60	53	46	[illegible]	22	32	31	32	52	49	48
	Minimum...	28	29	38	28	36	32	42	50	51	41	29	36	39	38	27	31	36	34	32	42	50	34	30	22	17	5	25	15	19	[illegible]	[illegible]
Springfield	Maximum...	46	51	54	62	67	55	65	68	67	59	54	45	52	47	56	57	56	56	47	52	57	46	34	31	20	27	29	25	51	53	52
	Minimum...	30	28	39	34	46	38	44	56	52	37	33	38	39	36	32	39	40	40	41	43	44	33	29	20	10	9	21	16	22	32	17
Southwest Plain.																																
Amoret	Maximum...	41	52	58	66	62	62	62	70	65	50	50	45	45	50	55	56	55	50	52	55	54	47	35	23	11	26	30	30	42	40	30
	Minimum...	28	26	35	37	28	30	40	43	44	32	25	36	38	30	28	32	33	40	36	40	32	31	28	5	−2	−6	20	8	18	29	11
Appleton City	Maximum...	43	53	58	62	66	57	63	69	65	56	55	48	42	51	56	60	55	52	53	54	57	51	57	30	24	23	32	32	46	43	32
	Minimum...	32	29	38	30	39	32	43	51	47	37	27	38	40	35	30	35	37	41	37	43	41	34	29	23	3	−3	22	12	19	32	19
Clinton	Maximum...	55	58	59	62	66	56	64	72	65	55	56	46	43	53	59	61	59	59	56	55	54	47	38	32	23	24	32	36	42	44	32
	Minimum...	36	28	29	28	42	31	40	43	48	35	26	35	40	35	27	30	34	39	37	43	40	24	28	22	5	6	22	12	22	30	11
Harrisonville §§	Maximum...	40	51	54	60	63	49	60	68	60	48	52	45	44	48	53	52	52	49	•54	59	53	38	32	24	15	30	30	30	35	41	25
	Minimum...	23	28	30	27	30	31	31	40	46	36	25	35	39	32	27	32	38	37	39	42	40	33	28	24	0	0	6	9	13	16	20
Lamar §§	Maximum...	50	52	58	63	67	68	65	71	65	58	57	44	47	51	59	62	58	50	51	56	60	38	32	26	20	28	28	33	50	46	[illegible]
	Minimum...	28	32	34	28	42	35	38	50	47	37	25	38	42	37	26	33	35	42	38	42	39	32	29	24	10	0	11	9	26	32	29
Lamonte	Maximum...	42	50	53	58	63	49	61	70	62	62	50	43	40	49	56	59	58	52	55	57	57	44	35	21	24	21	29	28	42	42	33
	Minimum...	31	29	39	26	34	30	35	47	36	32	27	31	39	34	26	35	32	34	38	42	42	32	29	23	4	−5	19	6	18	32	[illegible]
Marshall	Maximum...	42	48	52	53	63	53	61	65	62	....	52	42	41	47	51	57	55	52	53	51	57	50	33	30	24	20	29	25	39	43	36
	Minimum...	31	26	37	26	33	28	35	44	48	33	26	32	32	34	27	31	34	34	36	41	39	33	28	23	9	−4	20	13	16	26	18
Warrensburg	Maximum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warsaw	Maximum...	49	53	57	61	71	60	67	73	67	58	57	48	44	51	60	60	59	58	55	55	60	56	48	32	24	27	33	29	50	46	41
	Minimum...	31	26	36	24	32	33	38	40	51	30	22	28	42	38	25	26	32	33	32	44	37	29	30	24	12	−12	23	5	22	40	22
Northwest Plateau.																																
Chillicothe §§	Maximum...	41	45	46	63	64	63	42	61	60	58	47	51	40	50	51	56	59	55	48	53	57	50	35	36	31	26	57	18	45	40	40
	Minimum...	30	25	38	27	28	28	34	38	37	29	28	28	38	28	28	34	38	38	39	41	43	32	31	31	21	20	21	22	22	34	31
Grant City	Maximum...	40	44	46	49	53	49	56	58	58	46	48	45	40	45	55	56	53	47	50	48	51	45	36	25	19	27	36	29	35	35	33
	Minimum...	18	25	35	29	31	26	31	37	41	31	26	33	37	29	29	35	31	37	38	41	39	31	19	1	1	5	21	14	15	25	11
Kansas City	Maximum...	41	51	54	60	61	46	58	67	61	48	53	45	42	49	56	58	51	50	53	52	53	42	29	27	20	31	30	31	41	40	31
	Minimum...	35	32	40	40	44	31	44	47	46	38	32	28	38	32	39	41	39	42	45	41	42	27	24	19	6	6	20	15	24	31	16
Kidder §§	Maximum...	39	46	51	55	70	42	51	62	62	46	50	42	43	49	58	62	58	48	57	52	57	36	30	26	19	30	29	30	39	39	20
	Minimum...	33	29	37	32	38	28	38	44	45	33	30	39	38	30	32	30	37	38	38	41	42	33	36	22	9	9	26	15	21	29	17
Lexington §§	Maximum...	40	50	51	58	65	45	60	65	62	50	53	42	40	49	55	58	58	49	55	50	55	38	30	25	20	23	29	30	40	40	27
	Minimum...	33	30	39	32	35	30	37	44	47	35	30	35	38	35	30	37	33	38	40	42	43	35	27	23	13	0	22	12	20	30	25
Maryville §§	Maximum...	39	46	47	49	58	43	55	60	47	43	51	41	39	44	55	56	57	43	47	49	48	36	25	23	23	31	24	30	35	34	22
	Minimum...	15	25	21	27	29	26	26	34	36	30	23	23	35	25	27	30	33	33	35	39	38	28	20	18	−3	−3	6	10	11	16	11
Oregon	Maximum...	41	44	51	49	61	49	55	61	55	45	47	43	40	45	52	54	47	45	48	48	47	40	27	26	20	34	30	33	36	38	31
	Minimum...	28	25	31	30	35	27	31	39	37	30	25	31	32	26	31	38	34	33	38	38	35	23	24	16	−2	3	15	11	17	27	6
St. Joseph	Maximum...	42	46	52	53	62	43	59	63	61	46	50	43	40	46	57	57	54	46	53	50	50	41	27	26	22	32	28	32	38	39	29
	Minimum...	33	30	34	33	39	30	38	44	37	31	30	38	35	30	34	41	37	39	42	40	39	26	23	15	3	7	17	15	22	29	6
Tarkio	Maximum...	42	46	50	52	61	45	61	58	61	45	50	42	40	46	57	55	51	44	47	47	46	42	24	24	22	33	30	35	38	31	28
	Minimum...	26	26	38	30	32	27	31	36	36	31	24	31	33	27	31	39	36	34	40	41	40	21	19	15	0	5	17	13	16	21	10
Trenton	Maximum...	39	42	48	49	57	50	57	58	58	51	46	41	41	45	51	53	50	48	50	48	52	48	32	30	24	22	29	27	38	34	[illegible]
	Minimum...	39	27	36	30	32	28	35	41	45	32	30	34	37	30	30	26	36	38	39	41	40	32	21	19	8	5	18	18	24	18	5

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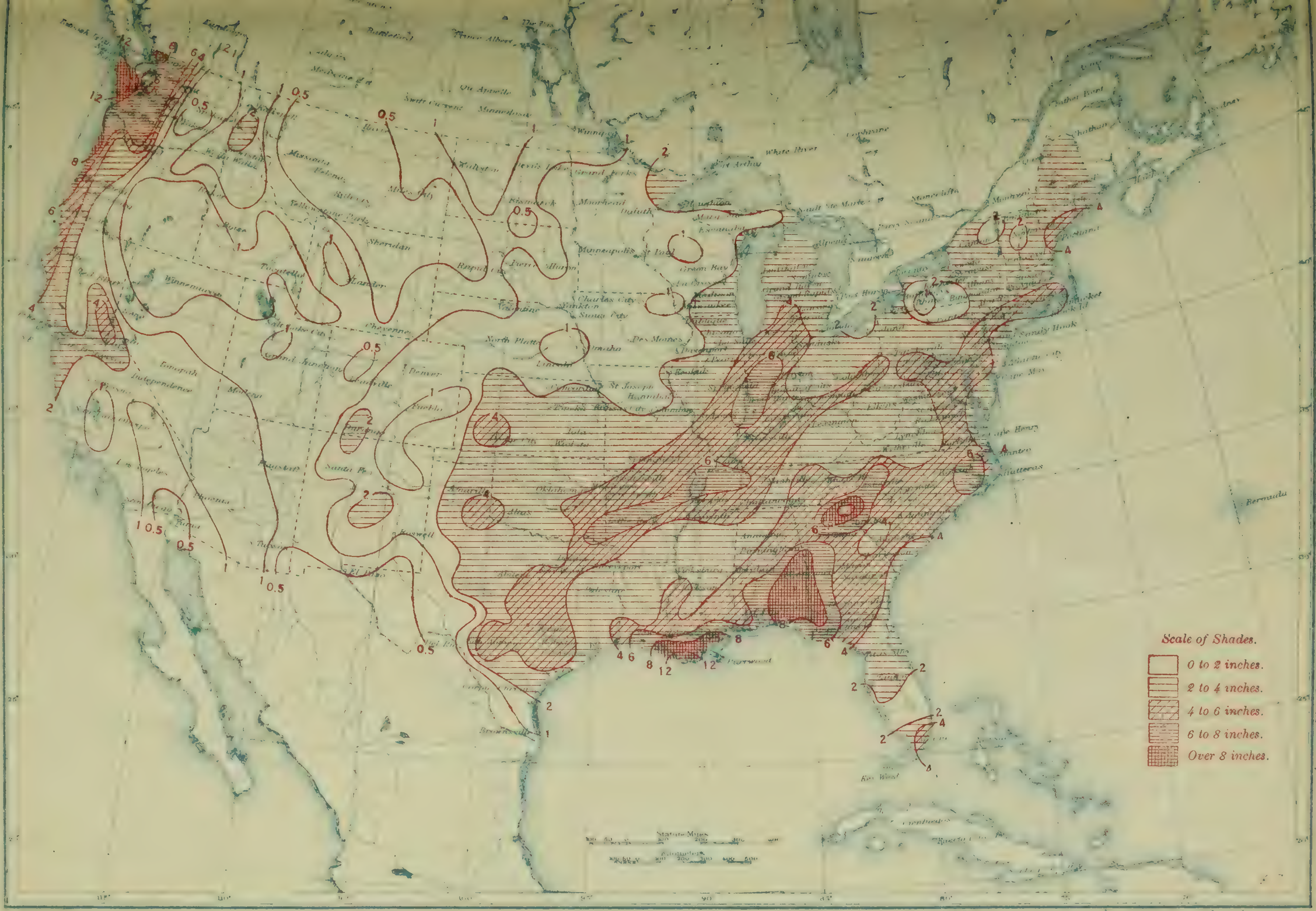
a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is char-
the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
Statute Miles
Kilometers
Bermuda
Key West
Hatteras
Sandy Hook
Portland
Montreal
Sault Ste Marie
White River
Port Arthur
Winnipeg
Grand Forks
Moorhead
Duluth
Marquette
Escanaba
Minneapolis
St Paul
Green Bay
La Crosse
Milwaukee
Grand Rapids
Port Huron
Charles City
Yankton
Sioux City
Des Moines
Davenport
North Platte
Omaha
Lincoln
St Joseph
Kansas City
Bismarck
Huron
Pierre
Rapid City
Valentine
Havre
Miles City
Williston
Kalispell
Helena
Missoula
Spokane
Walla Walla
Baker
Boise
Sheridan
Lander
Pocatello
Winnemucca
Salt Lake City
Cheyenne
Denver
Pueblo
Grand Junction
Leadville
Modena
Durango
Santa Fe
Independence
Los Angeles
San Diego
Yuma
Phoenix
Flagstaff
Tucson
El Paso
Roswell
Amarillo
Dodge City
Wichita
Oklahoma
Abilene
Palestine
Shreveport
Vicksburg
Corpus Christi
Brownsville
Memphis
Nashville
Knoxville
Lynchburg
Norfolk
Cape Henry
Manteo
Atlantic City
Cape May
Tampa
Pensacola
Mobile
Montgomery
Anniston
Atlanta
Augusta
Raleigh
Parkersburg
Elkins
Sandusky
Cleveland
Buffalo
Binghamton
Albany
Northfield
Nantucket
Block Island
Alpena
Parry Sound
Swift Current
Minnedosa
Qu'Appelle
Medicine Hat
Calgary
Battleford
Prince Albert
The Pas
Edmonton
Kamloops
Cochrane
Chatham
Sydney
Father Point
Quebec
Havana
Cienfuegos
0.5
1
2
4
6
8
12

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR DECEMBER, 1918, AT THE UNIVERSITY O SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 96 and 97.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a.m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau sta described in Circular L. Horizontal distance of the anemome pan, 2 inches. Height of cups of anemometer above rim of inches. The instrument shelter is 160 feet southeast of the pan; of thermometers above ground, 11 feet. Distance of rain gage fro 2.6 feet. The ground in the immediate vicinity of the pan slope north, average 5 per cent grade. The soil is covered by blue gra being part of the University campus. There are no bodies of wate nor are there any irrigation projects under way nearby. The topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising being George Reeder, Meteorologist and Section Director. The tions in the table herewith, were taken by M. Roy Weldon, A Observer, Weather Bureau. This is one of the "Class A" stat signed to furnish practical information relative to evaporation. F complete climatic records have been made at Columbia, Mo., Weather Bureau for about 29 years. These records are published are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for December, 1918, at Columbia, Mo.

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Daily evaporation	.052	.067	.076	.016	.035	.059	.021	.105	.012	.066	.005	.020	.036	.001	.023	.032	.029	.051	.012	.014	.012	.053	.032	*	*	*	*	*	*	*	*
Daily wind movement	61	60	67	60	38	58	45	43	37	49	45	35	36	50	38	39	29	32	30	47	38	31	62	104	....	....	....	....	....	....	....

First 3 days readings estimated. *Frozen; station closed for winter. ‡For 23 days. ||For 24 days. †Indicates minus (—) Observations taken at 7:15 a. m., 90th meridi

OBSERVERS' REMARKS.

Kirksville—The heavy snow of the 23-24th drifted badly, and hindered travel considerably both by rail and vehicle.

St. Catherine—The first 20 days of December were very favorable. The last 10 days were cold with snow; zero occurred on the 26th.

Unionville—During the night of the 23d there was high wind with snow, which drifted badly.

Warrenton—Month mild up to the 25th when we had our first cold snap. Ground too soft to pasture wheat

Caruthersville—Month was too wet for picking cotton and gathering corn; much of both still in fields and being badly damaged.

Gano—The month was favorable far most kinds of outdoor work. Stock generally in good condition.

Houston—We have a remarkable fall for stuff to grow. No real cold weather during the month. Wheat looking fine.

Lebanon—On the 23d there was a rain that turned to sleet and then to snow.

Lockwood—This has been a very open month up to th week. Month ended much colder with snow. Farm cond generally good.

Lamonte—There was a 7-inch snow on the 23d, and alth badly drifted, made a good covering for wheat. On the the roads were so badly drifted that rural carriers coul make their rounds.

Appleton City—First part of month was very mild. He snow of years at Christmas. Good protection for wheat.

Nevada—Snowfall of the 23d was more than 12 inche was heavy and settled considerably.

Warsaw—The first half of the month was all that far could wish. Wheat got a splendid start, and at the end o month was covered by snow and sleet.

Grant City—The greater part of the month was favorabl all kinds of work even plowing; and also for business. Best largest prospect for wheat the county ever had.

Oregon—The snow was badly drifted, and interfered traffic.

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

JUN 20 [illegible]

CLIMATOLOGICAL DATA

MISSOURI SECTION

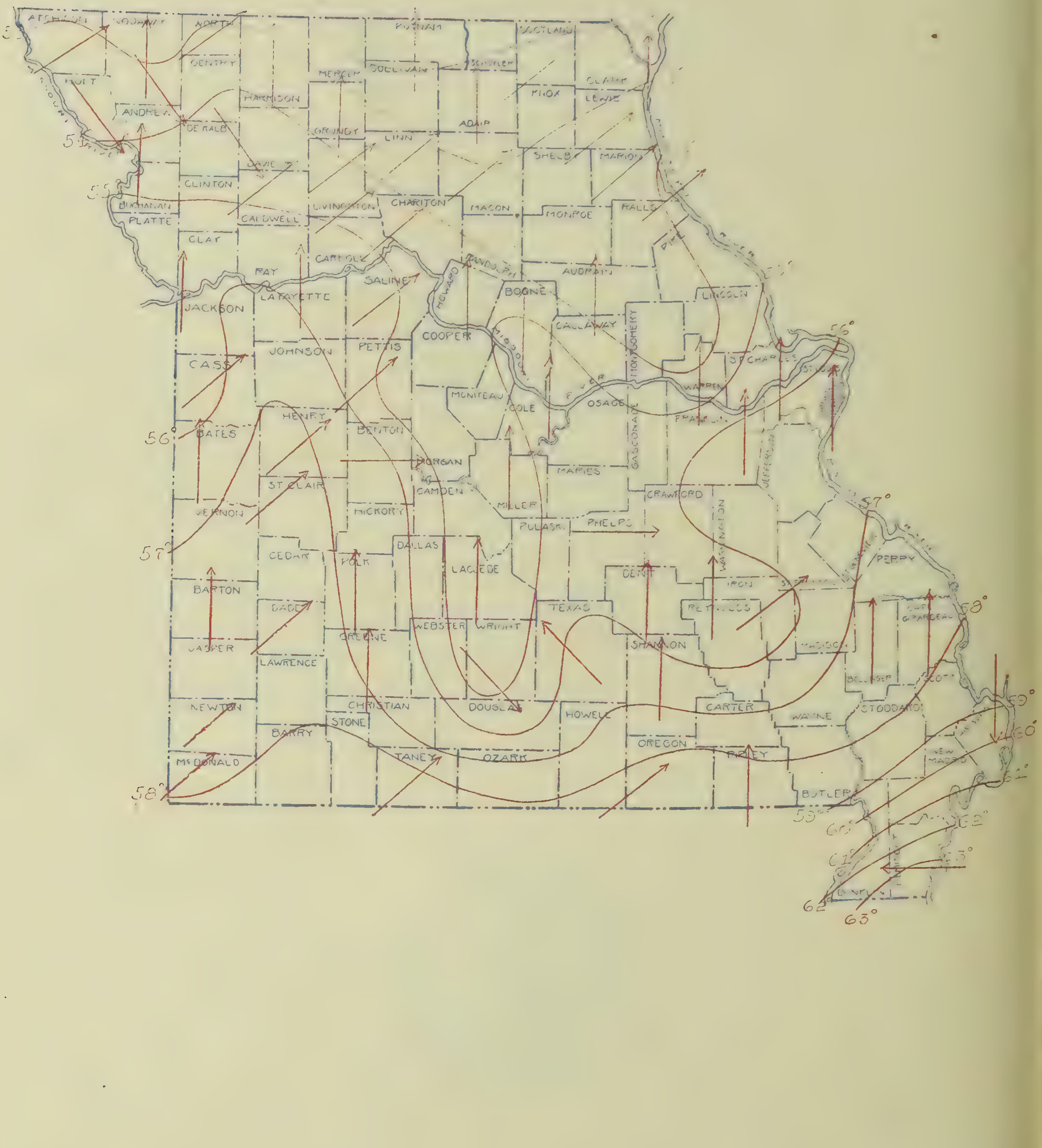
IN COOPERATION WITH THE UNIVERSITY OF MISSOURI

ANNUAL, 1918

BY
GEORGE REEDER
METEOROLOGIST

COLUMBIA, MO.,
WEATHER BUREAU OFFICE
APRIL 16, 1919.

MEAN TEMPERATURES AND PREVAILING WINDS FOR YEAR 1918.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MISSOURI SECTION.

GEORGE REEDER, Meteorologist.

VOL. XXII. COLUMBIA, MO., YEAR, 1918. No. 13

GENERAL SUMMARY.

The year 1918 in Missouri was of more than usual interest to the climatologist, and pathologist, as well as the agriculturist. It had decided oscillations of weather, and was marked by the so-called. and more or less fatal, Spanish influenza.

From the viewpoint of the agriculturist the year had its pleasant surprises as well as its setbacks. The summer drought was well-nigh disastrous in many ways; but the wheat crop matured into a fine yield before the drought was seriously felt, and owing to an ideal autumn, another was seeded and started off under prospects probably never before equaled in this State. Whereas much stock had been shipped out of the State during the summer because of a serious shortness of both grass and water, still, the autumn and early winter pasturage, sustained by ample moisture, was excellent, and all stock entered the winter in fine condition. Late gardens, fully revived by the copious September rains, continued to produce up to November 1st, on which date the first general killing frost occurred, being on an average, of about two weeks later than usual. The apple crop was only locally good. The year was free from severe storms and damaging river floods. A brief synopsis of principal data follows:

TEMPERATURE.

The annual mean for the State was 55.5°, or about 0.9° above normal. January, April, and September were markedly below normal. February, except the first week, March, May, June, August, October, and December were decidedly warmer than normal; July, and November were nearly normal. Severe cold prevailed during January and the first week of February, the winter minimum, —25°, occurring on February 1st. The heat of summer reached its maximum during the first ten days of August, during which time its effects upon vegetation was blasting, and hardly less so upon human and animal life; the maximum was 111°, or only 5° less than the maximum of the memorable summer of 1901.

The first general killing frost did not occur until November 1st, about two weeks later than the average. October, save in a few localities, was practically frostless, so far as the killing value was concerned.

The prevailing winds and mean temperature for the year are graphically shown on page 98.

PRECIPITATION.

The average precipitation for the State was 37.16 inches, or about 2.64 inches less than normal. January, February, March, June, July, and the first decade of August were drier than usual; the latter half of August, September, and the following three months were wetter than normal; December was the wettest of its name in many years.

The average annual snowfall for each division was as follows: Northeast plain, 24.5 inches; southeastern lowlands, 34.9 inches; Ozark Plateau, 25.3 inches; southwest plain, 23.1 inches; northwest plateau, 36.2 inches, and for the State, 27.9 inches. Most of this snow fell during January, and the last week in December.

The total precipitation (rainfall and melted snow) for the year is graphically shown on page 107.

THE WEATHER BY MONTHS.

January.—The monthly mean temperature was 16.4°. The minimum temperature was —24°. Considering the monthly mean alone it was the coldest January during the past 30 years; the minimum, however, has been equalled and exceeded several times in the same number of years. The snowfall was one of the greatest on record for January. It drifted badly, piling up several feet deep in places. Many railroad cuts and highways were made impassable; and for a time nearly all business and traffic were more or less demoralized, and continued rather below normal during most of the month. Snow covered the ground for about 26 days; in parts of the Ozarks snow lay on the ground the entire month. Peach buds were killed, except in a few orchards in the extreme Southeast. Wheat was protected and probably benefited by the snow covering.

February.—After about the first five days, which were nearly as cold as the preceding January, the weather of February was comparatively moderate, and favorable for outdoor work. The snowfall was the least on record for this month; the month was exceptionally dry. Wheat was in excellent condition for winter. Some land was prepared and seeded to oats. Stock were in good condition.

March.—This month was characterized by abundant sunshine, moderate temperatures, and deficient precipitation; and in these respects it was a close counterpart of the same month in 1910, the mildest March on record. Although lacking in moisture, no spring in years started out more promising. The soil was in fine, mellow workable condition; and all farm work was well ahead of the average. A large crop of oats was seeded.

April.—The month was decidedly cool as compared with monthly means of other years; but there were no damaging temperatures, as a rule, after the 11th. Farm work was well ahead, but vegetation was rather slow in coming out. Wheat was rated as excellent.

May.—Warmth and moisture were ample, and the entire month was favorable for outdoor work and crop growth, except by the end of the month the need of more moisture was beginning to be felt in the Southwest. There were no damaging hail or wind storms. All streams, save in the upper part of the Grand River, remained within their banks. The wheat crop was highly promising.

June.—Excessive warmth and sunshine with the lack of rainfall took some of the joy out of farm life because of the fading of bright crop prospects. There was not enough rain for pastures, meadows, truck, and gardens, except in a few localities. Corn was assiduously cultivated and held its own full well. Oats were damaged. Wheat, however, matured into a full crop and was harvested to advantage. There was some little light hail and wind damage.

July.—Temperature and sunshine were nearly normal. The lack of rainfall, the monthly fall being only 41 per cent of the normal, together with the low state of moisture in the air, were the abnormal features. By the close of the month the drought had become serious in all parts of the State. Corn was caught in its critical stage of silk and tassel and only immediate and copious rains could have saved it. Besides, because of the scarcity of grasses, grasshoppers had taken to the corn, stripping it of its leaves or blades in many fields.

August.—The steadily increasing heat and persistent dry weather of summer culminated in one of the most disastrous heat waves and droughts during the first ten days of August that probably ever occurred in Missouri. Fortunately, on and after the 10th the heat mitigated somewhat and rains were frequent and copious, but, except from the side of personal comfort, the change to more endurable weather was too late for most vegetation. The corn crop, except in some few bottom land fields, deteriorated to nearly a complete failure during the first week of August, probably one of the most rapid and decided losses of one of the brightest prospects ever known in this State. At the close of July, although suffering greatly, the crop was still savable for a fair yield. The hot winds, though, during the first week of August, which were comparable with the blast from a furnace, fairly cooked the stalks. Copious rains during the latter half of the month revived pastures and meadows but the return to life was slow because of the still hot soil.

September.—The monthly mean temperature of this month was the lowest for any September in 30 years. On the other hand minimum temperatures of 32° or lower occurred at only nine stations, and the resulting frost damage was unimportant. From the side of personal comfort it was a satisfying relief from the hot summer. The precipitation was greater than the average; and the soil was in good workable condition. Wheat sowing was nearly completed under favorable conditions. All grasses made fine growth, as well as late gardens.

October.—Ideal autumn weather prevailed. There was no general freeze, and in this respect the month stands alone when compared with other Octobers of about 30 years. Crops matured satisfactorily. The seeding of a large wheat acreage was completed. Cattle were fat; and grass and water were plentiful.

November.—The fine weather of October continued during the first 20 days of November, completing a period of about 50 days of exceptionally fine weather for outdoor pursuits. The last ten days of the month gave a touch of winter. All wheat had come up to a good stand. Pasturage was never better for the season.

December.—The month was wetter than normal; and the first three weeks were unusually mild. In these respects this December was in marked contrast to the one of last year. The first snow, and [illegible] cold snap, [illegible] on the 23d and 24th, spread over the entire State; and the remainder of the [illegible] was wintry. Traffic was hindered considerably by drifted [illegible] The wheat crop prospects were probably never better at [illegible] time of the year.

Comparative Annual Data for the State

Year	Temperature: Mean	Maximum	Minimum	[illegible]	Year	Temperature: Mean	Maximum	Minimum
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	−11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	−11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−21
[illegible]	[illegible]	[illegible]	−16	[illegible]	[illegible]	[illegible]	[illegible]	−29
[illegible]	[illegible]	116	[illegible]	[illegible]	1917	[illegible]	107	−23
[illegible]	54.1	[illegible]	−17	41.96	1918	[illegible]	111	−25
1903	53.6	[illegible]	−25	40.15	Average [illegible] yrs	54.7	116	−40

DAILY EVAPORATION, IN INCHES, AND WIND MOVEMENT, IN MILES, FOR THE YEAR, 1918, AT THE UNIVERSITY OF M SOURI, COLUMBIA, MO.

(See Precipitation and Temperature Data in Climatological Tables, pages 102 and 103.)

DESCRIPTION OF EVAPORATION STATION.

Name of evaporation station: University of Missouri, Columbia, Boone County, Missouri. Latitude: 38° 57'. Longitude: 92° 20'. Elevation: 737.5 feet above sea level. Name of some nearby building or other permanent landmark: Switzler Hall. Direction from pan, southeast; distance, 180 feet. Evaporation observations began April 1, 1916, 8 a.m., 90th meridian summer time. Observations are taken daily. The shape of the evaporation pan is cylindrical, made of 22 B.W.G. iron; diameter, 48 inches; depth, 10 inches, and it is filled to the approximate depth of 8 inches. The pan rests on wooden supports, and there is good ventilation under the pan. The pan is shaded in summer by reason of trees and buildings as compared with sea horizon about 2 hours in the morning and evening.

The instrumental equipment consists of a hook gage, still well, anemometer, maximum and minimum thermometer, Townsend support, thermometer shelter, rain gage, 12-inch TB pattern; additional instruments are, thermograph, barograph, hygrograph, and meteorograph. The equipment is installed in accordance with Weather Bureau standards described in Circular L. Horizontal distance of the anemometer fr pan, 2 inches. Height of cups of anemometer above rim of pan inches. The instrument shelter is 100 feet southeast of the pan; hei of thermometers above ground, 11 feet. Distance of rain gage from p 2.6 feet. The ground in the immediate vicinity of the pan slopes to north, average 5 per cent grade. The soil is covered by blue grass s being part of the University campus. There are no bodies of water n nor are there any irrigation projects under way nearby. The gene topography is rolling, with patches of forest trees.

The Weather Bureau is in charge of the work, the supervising offi being George Reeder, Meteorologist and Section Director. The obser tions in the table herewith, were taken by M. Roy Weldon, Assist Observer, Weather Bureau. This is one of the "Class A" stations signed to furnish practical information relative to evaporation. Full complete climatic records have been made at Columbia, Mo., by Weather Bureau for about 30 years. These records are published by a are obtainable at the Weather Bureau.

Daily Evaporation (inches) and Wind Movement (miles) for the Year, 1918, at Columbia, Mo.

Date.		DAY OF MONTH 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
March	Evaporation	010	.178	021	.069	.146	.034	.041	.050	.103	[illegible]	121	.057	.094	.392	.027	.092	.098	.215	.148	.126	.108	.159	.169	.011	.102	.127	.180	.181	[illegible]	170	.126
	Wind movement	62	30	38	49	31	79	52	32	47	121	79	72	31	143	105	47	51	57	42	16	31	13	91	48	43	109	63	57	69	42	18
April	Evaporation	.148	.166	.183	.093	.187	.116	.043	.172	.143	.132	.175	.058	.066	.143	.167	.000	.166	.161	.172	.059	.009	.036	.159	.201	.077	.035	.069	.020	.213	.073	....
	Wind movement	61	40	92	81	61	70	31	61	66	68	79	49	26	45	52	58	96	14	55	108	58	51	57	64	84	45	50	73	82	63	....
May	Evaporation	.140	.189	.244	.258	.247	.156	.039	.247	.228	.250	.213	.043	.009	.048	.197	.233	.262	.087	.174	.137	.178	.202	.087	.047	.183	.283	.183	.158	.158	.088	.247
	Wind movement	63	29	39	36	39	35	34	37	32	102	47	50	22	18	28	29	35	32	34	42	42	34	26	36	34	44	25	26	25	13	21
June	Evaporation	.307	.356	.241	.272	.257	.152	.212	.258	.171	.202	.268	.381	.308	.280	.134	.223	342	.424	.340	.218	.163	.322	.228	.274	.159	158	.264	.291	.255	.245	....
	Wind movement	48	19	20	21	11	19	40	36	19	20	20	34	39	28	25	21	26	48	36	38	27	48	27	21	57	27	20	39	39	36	....
July	Evaporation	250	.265	.314	.301	.244	.069	.222	.285	258	243	.218	.286	.156	.267	.256	.126	.264	.100	.195	.272	.271	.308	.266	.286	.265	.362	.275	.326	.277	.310	.288
	Wind movement	51	27	32	27	28	38	31	18	31	36	23	23	27	19	17	17	31	18	23	21	18	22	25	33	26	25	29	21	33	43	41
August	Evaporation	.115	.275	.291	.312	.417	.458	.112	.344	.262	.240	.261	.268	.321	.297	.244	.144	.196	.219	.172	.176	.149	.192	.220	.134	.069	.141	.263	.314	.097	.183	.091
	Wind movement	25	23	31	32	40	47	39	41	38	29	28	21	29	26	18	18	18	12	47	16	18	22	33	28	12	24	20	22	29	28	33
September	Evaporation	.171	.093	.080	.069	.100	.107	.076	.117	.140	.116	.127	.167	.165	.102	.092	.033	.080	.093	.088	.184	095	.075	.090	.100	.097	.054	.120	.137	.082	.118	....
	Wind movement	19	32	21	55	39	21	14	12	11	15	13	30	29	17	26	29	20	27	23	25	25	27	10	17	16	16	37	14	21	17	....
October	Evaporation	.084	.013	.093	.051	.114	.151	.178	.093	.090	.078	.031	.007	.053	.068	.085	.105	110	.130	.097	.031	.082	.086	.010	.000	.060	.009	.023	107	.079	.070	.068
	Wind movement	52	17	20	23	45	32	39	34	22	22	11	14	17	26	17	25	17	22	63	20	24	22	11	27	31	51	31	19	56	29	53
November	Evaporation	.005	.067	.067	.080	.060	.104	†.001	.003	063	.020	.038	.060	.049	.067	.053	†.004	.047	.093	.048	.036	.033	008	018	§.015	§.025	§.041	026	§.015	§.039	§047	....
	Wind movement	17	28	43	32	43	49	39	67	29	32	26	31	28	29	47	61	64	109	97	68	50	57	62	48	32	20	16	51	59	27	....
December	Evaporation	§.052	§.067	§.076	.016	.035	.059	.021	.105	.012	.060	.003	.020	†.036	.001	.023	.032	.029	.051	.012	.014	.015	.053	.032	*....	*....	*....	*....	*....	*....	*....	*....
	Wind movement	61	60	67	60	38	58	45	43	37	40	45	35	36	50	38	39	29	32	30	47	38	31	62	104	....	....	....	....	....	....	....

§ Estimated; slightly frozen. *Frozen; station closed for winter. ‡For 23 days. ‖For 24 days. †Indicates minus (—) Observations taken at 6:45 a. m., 90th meridian ti

Climatological data for Year, 1918.

Stations	Counties	Temperature (Degrees Fahrenheit)							Precipitation (inches)							Number of days				Prevailing direction of wind.
		Elevation, feet	Length of record, yrs.	Annual mean	Highest	Date	Lowest	Date	Length of record, yrs.	Total	Greatest monthly	Month	Least monthly	Month	Total snowfall	With precip. .01 inch or more	Clear	Partly cloudy	Cloudy	
east Plain.																				
[illegible]	Chariton	650	38	54.4	106	Aug. 4	−20	Jan. 12	38	29.[illegible]8	5.94	May	0.68	Mar.	42.7	78	222	2	141	sw.
[illegible]	Randolph	731	20		110	" 4	−21	" 12	20	30.07	5.51	"	1.17	"	35.0	84	206	102	57	......
[illegible]	Boone	784	29	55.0	108	" 4	−19	" 12	31	39.65	9.69	Sept.	0.64	"	19.7	99	131	133	101	s.
[illegible]	Howard	725	36	54.4	110	" 4	−23	" 12	36	30.43	4.66	"	0.62	"	29.5	68	......	......	......	......
[illegible]	Callaway	818	27	55.5	107	" 4	−22	" 12	27	33.75	6.67	April	0.16	July	21.1	95	......	......	......	sw.
[illegible]	Scotland	700	......	......	......	......	......	......	25	29.92	6.23	May	0.37	Mar.	8.5	76	110[a]	105[a]	149[a]	sw.
[illegible]	Marion	534	27	54.0	108	Aug. 4	−20	Jan. 12	27	33.22	5.89	Sept.	0.88	Feb.	21.4	109	147	102	116	sw.
City	Cole	557	31		108	" 4	−20	" 12	36	32.11	5.85	"	0.58	Mar.	21.0	90	242	41	82	s.
[illegible]	Chariton	660	......		......	......	......	......	6	......	......	......		......	29.5	......	......	......	......	......
[illegible]	Adair	969	30	52.9	106	Aug. 4	−2[illegible]	Jan. 12	37	29.41	4.90	May	0.51	Mar.	25.7	93	167	145	53	s.
[illegible]	Pike	469	25	53.8	105	" 5	−20	" 12	38	39.72	6.[illegible]4	April	1.10	"	21.6	102	215[a]	77[a]	72[a]	w.
[illegible]	Macon	875	20	..	107	" 4	......	......	26	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Audrain	797	30	53.9	109	" 6	−22	Jan. 12	41	33.17	6.33	April	0.28	Mar.	32.5	53	205	26	134	s.
[illegible]	Franklin	793	28	56.1	110	" 3	−21	" 12	35	4[illegible].59	7.70	"	0.28	"	13.0	81	168	162	95	s.
[illegible]	Marion	652	17	52.8	110	" 5	−22	" 12	20	31.09	5.00	"	0.32	"	20.2	77	183[g]	62[g]	113[g]	sw.
[illegible]	Linn	850	8	53.3	106	" 4	−2[illegible]	" 12	8	26.78	4.20	May	0.25	"	37.2	89	169	139	57	sw.
arles	St. Charles	456	31	55.8	109	" 4	−20	" 12	41	3[illegible].91	6.68	Sept.	T.	"	7.0	56	153	98	114	s.
ouis (1)	St. Louis City	717	46	56.9	105	" 4	−17	" 12	82	35.[illegible]	7.09	April	0.60	July	12.4	104	147	116	102	s.
ouis (2)	do	578	7	56.1	106	" 4†	−18	" 12	7	42.46	8.[illegible]6	"	0.72	Mar.	15.1	109	151	111	103	s.
[illegible]	Shelby	776	1	......	......	......	......	......	25	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Lewis	650	21	54.8	111	Aug. 4	−21	Jan. 12	26	3[illegible].53	7.10	May	T.	Mar.	28.0	68	146[b]	140[b]	77[b]	sw.
[illegible]	Putnam	1,072	26	51.4	108	" 5	−21	Feb. 1	26	37.25	9.35	"	0.59	"	47.5	79	230[a]	55[a]	79[a]	s.
[illegible]	Warren	865	36	54.0	109	" 5	−21	Jan. 12	59	3[illegible].50	9.12	"	0.51	"	17.6	98	104[b]	133[b]	126[b]	s.
Iowa	Lee, Iowa	574	47	53.1	108	" 4	−21	" 12	17	28.55	6.72	"	0.16	"	23.6	106	157	131	77	s.
Section means and	extremes	......	......	54.5	111	" 4	−24	" 12	......	31.[illegible]9	9.69	Sept.	T.	"	24.5	87	168	99	98	s.
east Lowlands.																				
thersville	Pemiscott	220	23	63.0	111	Aug. 11	−15	Jan. 12	27	52.10	8.56	May	0.65	July	24.0	75	213[d]	52[d]	96[d]	e.
[illegible]	Ripley	344	15	58.3	109	" 4	−16	" 13	15	51.10	8.09	"	0.16	Mar.	37.0	82	215	51	99	s.
[illegible]	Cape Girardeau	458	29	57.1	107	" 3	−18	" 12*	29	55.99	11.53	"	0.21	July	37.7	88	150	127	108	s.
Hill	Bollinger	420	25	58.4	106	" 4	−17	" 12	27	44.01	7.50	"	0.40	"	38.0	64	200	48	117	s.
[illegible]	Bollinger	500	......	......	......	......	......	......	5	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Butler	339	15	57.6	108	Aug. 5	−18	Jan. 12	15	4[illegible].51	8.65	Dec.	0.55	Mar.	47.7	86	166[f]	54[f]	139[f]	......
[illegible]	Alexander, Ill.	359	47	58.2	102	" 3	−16	" 12	47	5[illegible]	6.18	April	0.74	July	25.0	102	110	96	159	n.
Section means and	extremes	......	......	58.8	111	" 11	−18	" 12†	......	46.96	11.53	May	0.21	"	34.9	83	172	71	122	s.
Ozark Plateau.																				
[illegible]	Iron	925	38	54.7	107	Aug. 3	−20	Jan. 12	41	52.16	10.90	April	0.47	July	20.8	99	128[a]	123[a]	103[a]	sw.
[illegible]	Shannon	1,078	25	56.2	107	" 4	−19	" 12	25	41.41	7.88	May	0.45	Mar.	23.0	62	239[b]	47[b]	77[b]	s.
[illegible]	Polk	1,071	25	56.2	103	June 18†	−20	" 12	32	41.68	6.08	April	1.10	Jan.	18.0	70	202	73	90	sw.
[illegible]	Barry	1,500	11	......	......	......	......	......	19	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Pulaski	1,126	11	......	......	......	......	......	11	......	......	......	......	......	......	......	......	......	......	......
[illegible]	McDonald	1,000	20	....	106	Aug. 4	−21	Jan. 12	20	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Miller	934	21	54.2	106	" 4	−22	" 12	21	31.92	5.71	April	0.38	Mar.	28.5	72	119	179	67	s.
[illegible]	Reynolds	918	9		......	......	......	......	20	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Dent	1,250	15	55.4	106	Aug. 4	−22	Jan. 12	17	41.15	8.75	April	0.65	Feb.	19.1	85	200	85	80	s.
[illegible]	Iron	1,000	26	54.8	108	" 3†	−20	" 12	26	41.41	8.51	"	0.25	July	17.5	72	181	118	66	s.
[illegible]	Taney	735	33	58.4	110	" 11	......	......	16	52.91	12.11	April	T.	Feb.	46.5	74	211[d]	0	150[d]	sw.
[illegible]	Texas	1,280	26	56.8	103	July 27	−19	Jan. 12	26	34.14	4.13	June‡	1.08	"	18.0	79	212	64	89	se.
[illegible]	Oregon	955	18	58.3	106	Aug. 11	−17	" 12	19	49.14	9.90	May	0.57	Mar.	42.5	89	171[g]	85[g]	102[g]	sw.
[illegible]	Laclede	1,265	31	54.5	104	" 4†	−21	" 12	32	44.45	7.98	April	0.70	Feb.	25.5	86	224	70	71	s.
[illegible]	Dade	1,078	13	57.2	103	" 4	−19	" 12	23	49.99	7.63	"	0.52	"	23.9	69	210[h]	51[h]	96[h]	sw.
ton Grove	Wright	1,490	13	51.8	104	" 4	−19	" 12	21	42.37	7.39	"	0.22	"	14.0	90	141	99	125	nw.
[illegible]	Newton	1,011	33	57.6	104	" 3†	−19	" 12	36	42.65	7.60	Nov.	0.01	"	28.0	108	238	44	83	sw.
[illegible]	Phelps	1,139	19	55.8	106	" 5†	−21	" 12	35	40.77	8.90	April	0.80	July	24.4	82	186[a]	114[a]	64[a]	w.
ngfield	Greene	1,350	31	56.1	101	" 4	−19	" 12	41	34.62	4.82	Sept.	0.64	Feb.	28.5	117	205	84	76	s.
Section means and	extremes	......	......	56.1	110	" 11	−24	" 12	......	41.84	12.14	April	T.	"	25.2	84	192	83	90	s.
Southwest Plain.																				
[illegible]	Bates	831	12	56.3	111	Aug. 3	−23	Jan. 12	12	26.33	4.27	Sept.	0.62	June	20.0	72	188	83	94	s.
leton City	St. Clair	853	26	57.3	107	" 3†	−21	" 12	27	29.34	4.18	April	0.73	Feb.	16.1	85	184[d]	106[d]	71[d]	sw.
[illegible]	Henry	765	27	57.0	107	" 3	−19	" 12	32	31.81	5.90	Sept	0.68	Aug.	32.0	65	172[c]	117[c]	73[c]	sw.
risonville	Cass	912	41	54.6	110	" 5†	−19	" 12	42	32.23	6.15	"	0.99	Jan.	22.2	91	125	47	193	sw.
[illegible]	Barton	980	31	57.4	109	" 3	−21	" 12	58	46.78	7.95	Oct.	0.43	Feb.	16.0	65	183	65	117	s.
[illegible]	Pettis	863	19	55.0	110	" 3	−21	" 12	32	39.32	9.50	Sept.	0.22	Jan.	18.0	63	190[c]	104[c]	68[c]	sw.
[illegible]	Saline	779	30	55.2	110	" 4	−20	" 12	30	33.52	7.59	"	1.21	Mar.	27.5	85	148[e]	117[e]	95[e]	sw.
[illegible]	Vernon	860	27	......	......	......	......	......	27	......	......	......	......	......	......	......	......	......	......	......
burg	Johnson	883	36	......	......	......	......	......	41	......	......	......	......	......	......	......	......	......	......	......
[illegible]	Benton	715	18	56.8	109	Aug 3	−22	Jan. 12	23	38.55	6.41	Sept.	1.00	Feb.	33.0	82	181	134	50	w.
Section means and	extremes	......	......	56.4	111	" 3	−23	" 12	......	34.80	9.50	"	0.22	Jan.	23.1	76	172	97	96	sw.
Northwest Plateau.																				
lon	Livingston	730	22	55.9	111	Aug. 4	−22	Jan. 12	22	32.83	5.06	May	0.35	Mar.	44.5	63	223	78	64	sw.
thany	Harrison	916	27	53.7	109	" 4	−25	Feb. 1	27	30.87	6.16	"	0.32	"	52.5	76	166	97	102	sw.
licothe	Livingston	768	11	53.8	110	" 4	−20	Jan. 12	14	29.39	4.19	Dec.	0.40	"	35.1	65	195[a]	61[a]	108[a]	sw.
ception	Nodaway	982	30	53.7	109	" 4	−23	" 12	34	31.09	8.95	May	0.38	"	25.5	78	149	153	63	nw.
latin	Daviess	803	......	......	......	......	......	......	19	32.22	4.83	"	0.38	"	45.7	92	198	90	77	nw.
nt City	Worth	1,134	16	53.1	110	Aug. 4	−21	Jan. 12	28	31.78	7.83	"	0.49	"	44.3	66	221	52	92	s.
nsas City	Jackson	963	30	56.1	108	" 3	−16	" 11	30	34.24	7.29	Sept.	0.48	"	32.2	103	187	93	85	s.
idder	Caldwell	1,020	26	54.9	107	" 4	−21	" 12	32	31.66	5.02	May	0.52	"	43.5	86	222[c]	55[c]	85[c]	sw.
xington	Lafayette	688	34	55.7	109	" 4	−19	" 12	37	29.57	4.62	"	0.53	"	25.5	71	211	0	154	s.
erty	Clay	864	29	......	......	......	......	......	29	......	......	......	......	......	......	......	......	......	......	......
ryville	Nodaway	1,036	25	50.9	110	Aug. 4	−23	Jan. 12	25	35.36	8.15	May	0.17	Mar.	34.2	85	218	35	112	s.
egon	Holt	1,048	63	52.5	110	" 4	−21	" 12	63	24.89	4.24	"	0.14	"	35.7	68	188	98	79	nw.
Joseph	Buchanan	967	11	55.0	109	" 3	−19	" 12	45	29.96	6.71	"	0.34	"	20.6	95	169	104	92	s.
rkio	Atchison	976	16	53.3	107	" 4	−20	" 11	25	34.12	6.44	Oct.	0.04	"	26.9	73	218	65	82	sw.
nton	Grundy	822	23	53.6	104	" 4†	−20	" 12	24	37.20	7.21	May	0.20	"	40.5	90	190[a]	87[a]	87[a]	s.
Section means and	extremes	......	......	54.0	111	" 4	−25	Feb. 1	......	32.01	8.95	"	0.04	"	36.2	79	197	76	92	s.
State means and	extremes	......	......	55.5	111	§Aug. 3†	−25	¶Feb. 1	......	37.16	12.14	*April	T.	‖Feb.	27.9	82	182	86	97	s.

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† Also on other dates.

‡ Also in Dec.

[a], [b], [c], indicate the number of days missing from records, a, 1; b, 2; c, 3; etc.

§ At Amoret, Aug. 3; Avalon and Steffenville, Aug. 4; and Caruthersville, Aug. 11.

¶ At Bethany and Trenton.

* At Hollister.

‖ At Goodland in Feb; Steffenville in March.

Monthly and Annual Precipitation for the Year 1918, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain.																										
Boonville	0.99	-0.99	0.87	-1.71	0.77	-2.26	5.29	[illegible]	1.34	-0.91	2.74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Brunswick	0.91	-0.83	1.41	-0.60	0.68	[illegible]	3.47	[illegible]	[illegible]	[illegible]	[illegible]	-1.83	2.69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-1.26	2.47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Clifton Hill	1.75	-0.26	1.64	[illegible]	1.17	[illegible]	3.75	[illegible]	[illegible]	0.21	2.14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Columbia	1.00	[illegible]	[illegible]	-0.83	0.64	-2.39	5.07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fayette	2.25	+0.14	0.99	[illegible]	0.62	[illegible]	3.15	-0.11	[illegible]	0.22	[illegible]	[illegible]	1.17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fulton	1.30	-1.31	2.00	0.10	0.85	2.06	6.07	0.98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Glencoe	....	....	....	....	....	....	....	....	....	....	1.93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gorin	0.50	-1.26	1.14	-0.18	0.37	[illegible]	3.19	-0.63	[illegible]	[illegible]	[illegible]	+0.72	1.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hannibal	0.98	-1.22	0.88	-0.72	1.10	[illegible]	1.40	[illegible]	5.20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hermann	1.08	-1.15	1.34	[illegible]	0.32	-2.68	5.60	[illegible]	6.56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Jefferson City	0.88	-1.50	0.92	[illegible]	0.58	-2.18	[illegible]	[illegible]	[illegible]	+0.74	2.13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Keytesville	1.95	....	1.17	....	[illegible]	....	3.41	....	6.61	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kirksville	0.89	-0.75	[illegible]	[illegible]	[illegible]	-2.26	3.55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	1.83	-0.22	[illegible]	-0.91	1.10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+1.12	3.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Macon	....	....	1.00	[illegible]	[illegible]	[illegible]	2.87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	1.25	-0.93	0.52	[illegible]	[illegible]	[illegible]	6.23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oakfield	1.14	-1.43	1.68	[illegible]	[illegible]	3.62	7.70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pacific	1.34	....	1.51	....	0.48	....	7.05	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Palmyra	1.31	1.31	1.02	-1.27	0.32	-2.59	5.10	+1.75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.16	2.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Catherine	0.59	....	[illegible]	....	0.25	....	2.82	....	[illegible]	....	2.88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Charles	0.85	-1.65	0.35	-2.55	T.	-3.14	4.94	[illegible]	[illegible]	[illegible]	2.60	1.56	1.77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-0.37	1.21	[illegible]	[illegible]	[illegible]
St. Louis (1)	1.31	-0.96	2.09	-0.66	0.67	-2.76	7.09	+3.57	3.28	0.96	1.47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+1.22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
St. Louis (2)	1.69	....	1.98	....	0.72	....	8.56	....	[illegible]	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32.46	[illegible]
Shelbina	....	....	1.17	-1.02	0.99	-1.63	4.55	+1.36	1.22	[illegible]	[illegible]	2.29	2.43	-2.17	2.62	[illegible]	[illegible]	0.16	[illegible]	-0.72	2.64	[illegible]	2.21	[illegible]	[illegible]	[illegible]
Steffenville	1.02	-1.45	1.68	-0.37	T.	-2.82	3.31	-0.09	7.10	[illegible]	2.75	-1.42	1.73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Union	1.43	....	1.32	....	0.67	....	8.79	....	6.14	....	3.12	....	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	....	2.53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unionville	1.36	-0.74	1.58	-0.42	0.59	-1.72	3.88	+0.39	9.55	[illegible]	[illegible]	-1.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.72	3.45	+1.61	2.83	-1.14	2.25	[illegible]	[illegible]	[illegible]
Valley Park	1.20	....	[illegible]	....	0.75	....	7.53	....	4.05	....	[illegible]	....	0.82	....	7.31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Warrenton	1.20	-1.26	1.10	-1.41	0.31	-2.98	4.50	[illegible]	9.12	[illegible]	[illegible]	-0.10	0.71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.53	[illegible]	2.28	-0.64	2.14	[illegible]	[illegible]	[illegible]
Keokuk, Iowa	0.70	-0.99	1.15	-0.47	0.16	-2.21	[illegible]	-0.68	6.72	[illegible]	[illegible]	-0.45	1.08	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.16	[illegible]	2.91	-1.06	2.16	[illegible]	[illegible]	[illegible]
Southeast Lowlands.																										
Cape Girardeau	4.00	-0.10	0.42	-1.99	1.35	-1.94	6.06	+2.35	11.17	+7.45	2.85	-0.78	0.29	3.07	....	....	....	....	....	....	2.90	-1.64	[illegible]	-5.74	....	....
Caruthersville	7.18	+2.60	1.45	-2.58	1.24	2.68	4.83	+0.96	8.56	[illegible]	[illegible]	+0.28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+3.30	2.87	0.07	2.60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Doniphan	6.15	+1.79	0.95	-2.69	0.46	-3.10	7.51	+2.10	8.00	+4.25	1.92	2.52	1.01	[illegible]	[illegible]	[illegible]	[illegible]	+3.22	5.09	+2.35	1.87	-1.18	[illegible]	[illegible]	[illegible]	[illegible]
Jackson	2.51	-1.40	0.92	-2.19	0.91	-3.46	6.01	+1.62	11.53	[illegible]	3.05	-1.17	0.21	[illegible]	[illegible]	[illegible]	[illegible]	+1.55	3.19	-0.21	2.04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Marble Hill	1.28	-2.50	[illegible]	-2.39	0.47	-3.98	6.29	+1.88	7.50	+3.22	[illegible]	[illegible]	0.40	1.42	4.15	[illegible]	[illegible]	+1.74	4.20	-1.55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Madrid	5.49	+0.15	1.67	-2.46	1.31	-4.03	7.54	+3.43	7.19	+2.80	1.89	+0.91	0.79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.31	+0.13	2.42	-1.53	4.36	[illegible]	[illegible]	[illegible]
Patton (near)	1.50	....	0.80	....	0.70	....	5.50	....	10.20	....	[illegible]	....	1.65	....	3.55	....	1.10	....	....	....	1.90	....	[illegible]	....	....	....
Poplar Bluff	4.75	+0.67	0.66	-2.82	0.55	-4.20	7.00	+2.79	7.57	+2.57	3.15	-2.17	0.74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.13	+2.43	3.03	-0.29	[illegible]	[illegible]	49.54	[illegible]
Cairo, Ill.	3.47	-0.35	1.03	-2.30	1.56	-2.16	6.18	[illegible]	5.15	[illegible]	[illegible]	-0.98	0.74	-2.71	1.62	[illegible]	[illegible]	[illegible]	3.67	+0.44	1.34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ozark Plateau.																										
Arcadia	2.80	-0.46	0.98	-2.41	3.31	-0.76	10.90	+6.42	6.63	+1.94	3.38	0.94	0.47	-3.91	5.15	+1.55	[illegible]	+0.27	[illegible]	+4.89	2.61	-1.08	4.27	-1.22	52.16	+6.
Arlington	0.30	-1.72	1.00	-1.91	1.10	-1.84	7.87	+4.15	3.81	-0.51	2.74	-0.80	1.02	-2.34	3.42	[illegible]	3.26	[illegible]	0.80	-1.42	2.79	+0.06	2.98	[illegible]	[illegible]	-5.
Birchtree	3.33	+0.22	0.86	-1.90	0.45	-4.08	4.91	+0.25	7.88	[illegible]	[illegible]	-0.94	1.35	[illegible]	[illegible]	-0.50	[illegible]	+1.91	3.17	[illegible]	2.29	-0.53	4.21	[illegible]	41.41	-2.
Bolivar	1.16	-0.89	2.00	-0.42	3.03	-0.06	6.08	+2.16	4.62	-0.52	3.13	-2.16	3.87	[illegible]	2.78	[illegible]	[illegible]	+0.78	3.80	+0.77	4.74	-2.12	3.13	[illegible]	[illegible]	-4.
Cassville	1.96	-0.31	0.12	-1.94	1.56	-2.38	3.19	-0.80	4.04	-1.65	....	....	[illegible]	-3.14	[illegible]	[illegible]	[illegible]	+1.16	4.13	+1.26	....	....	2.20	-0.39	....	....
Crocker	1.70	-0.74	...	....	1.28	-1.27	...	....	3.10	-0.91	4.50	+1.22	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dean	2.60	+0.19	0.00	-2.07	3.77	+0.33	4.34	+0.19	3.87	[illegible]	[illegible]	-2.53	1.94	-2.18	[illegible]	-0.63	[illegible]	+4.38	4.62	+1.68	....	....	3.02	+0.87	....	....
Eldon	1.06	-0.67	0.45	-2.04	0.38	-2.73	5.74	+1.35	4.08	-0.71	[illegible]	-1.90	1.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.74	+0.13	2.76	+0.43	2.47	-0.94	31.92	[illegible]
Farmington	....	....	....	....	....	....	....	....	....	....	....	....	1.48	....	6.03	....	3.95	....	4.34	....	2.28	-1.91	4.44	-1.60	....	....
Gano	2.51	-0.58	0.65	-2.07	1.17	-2.26	8.75	+4.31	4.91	+0.53	3.32	-1.22	1.80	1.98	4.82	[illegible]	[illegible]	-1.35	2.67	+1.09	3.60	+1.22	3.87	+1.87	41.15	+0.
Goodland	1.74	-1.32	1.10	-1.67	1.49	-2.90	8.51	+3.49	7.24	[illegible]	[illegible]	-1.40	0.25	-4.24	6.67	-2.92	3.36	-0.55	3.95	+0.97	[illegible]	-0.35	3.95	+1.41	44.41	[illegible]
Hollister	4.06	+1.24	T.	-2.60	3.80	+0.63	12.14	+8.80	6.25	[illegible]	2.91	-1.03	2.62	-1.44	4.89	+1.01	5.24	-1.64	2.53	[illegible]	3.57	+1.25	4.96	[illegible]	52.91	+15.
Houston	2.30	-0.39	1.08	-1.37	2.02	-2.31	3.41	[illegible]	3.57	-0.55	4.13	-0.70	3.99	-0.30	2.71	-1.02	2.92	[illegible]	1.18	-1.41	2.70	+0.22	[illegible]	+1.89	34.14	[illegible]
Koshkonong	4.79	+1.19	0.67	-2.44	0.57	-3.33	4.82	[illegible]	9.99	+5.48	4.78	+0.53	1.33	-2.65	4.70	+0.43	4.71	+1.17	3.89	+1.35	2.82	-0.14	6.57	+3.11	49.44	+4.
Lebanon	1.48	-1.14	0.70	-1.97	1.15	-2.43	7.98	+3.79	3.90	-1.64	7.21	+2.11	1.94	-2.50	5.96	+2.71	[illegible]	-0.74	3.95	+1.04	4.12	-1.56	2.69	0.00	44.45	[illegible]
Lockwood	0.77	-1.04	0.52	-1.69	2.09	-0.27	7.63	+4.18	5.35	+0.49	8.06	+3.17	2.80	-2.44	2.93	-1.28	[illegible]	-1.12	6.30	+3.38	5.26	-3.15	3.16	+1.15	49.99	+7.
Mountain Grove	1.87	-1.11	0.22	-2.35	1.65	-2.90	7.39	+2.48	7.03	+2.46	5.01	+0.61	2.02	[illegible]	3.70	-0.64	5.39	-0.71	1.51	-1.22	4.09	-1.80	4.49	+2.21	[illegible]	-1.4
Neosho	3.06	+0.44	0.04	-2.52	3.28	-0.23	4.92	+0.74	4.99	-1.14	2.03	-3.45	1.28	-3.01	[illegible]	-1.90	5.25	+1.04	4.97	+1.85	[illegible]	[illegible]	3.02	[illegible]	[illegible]	-3.
Rolla	1.33	-1.27	1.01	-1.32	1.00	-2.45	8.90	+4.29	4.05	-0.93	2.94	-1.18	0.80	-3.47	5.87	-1.95	3.86	[illegible]	3.37	+0.77	4.29	+1.97	[illegible]	+1.24	40.77	-0.4
Springfield	1.96	-0.70	0.64	-1.63	1.33	-2.74	4.25	+0.39	4.19	-1.36	3.61	-1.58	1.11	-3.68	3.12	-1.19	4.82	+1.06	2.72	-0.08	3.90	+1.26	2.97	+0.30	31.62	-9.
Steelville	0.66	-1.39	0.95	-1.58	1.00	-0.99	7.76	+3.56	4.99	+0.66	3.65	-0.57	5.15	-0.11	3.65	+1.20	5.75	+2.53	4.75	+2.33	4.09	+1.35	2.94	+1.10	43.34	+7.
Tuscumbia	1.18	......	0.93	......	0.85	.....	5.84	......	4.11	......	2.04	......	0.92	......	3.65	......	7.27	......	2.67	......	3.40	......	2.67	......	35.53	.....
Southwest Plain.																										
Amoret	0.91	-0.55	0.88	-1.82	1.31	-1.24	2.85	-1.50	2.42	-2.80	0.62	-4.00	2.28	-2.19	1.54	-1.94	4.27	+0.37	3.88	+1.55	2.00	-0.21	3.37	+1.63	26.33	-12.7
Appleton City	1.27	-0.74	0.73	-1.43	0.83	-2.31	4.18	-0.10	2.58	-3.09	1.99	-3.35	2.72	-2.26	1.53	-2.12	3.98	+0.47	3.54	-1.18	3.45	+1.27	2.54	+0.80	29.34	-11.
Clinton	1.91	-0.18	0.77	-1.49	1.31	-1.53	3.59	-0.47	4.99	-0.52	2.80	2.09	3.31	-0.85	0.68	-2.52	5.90	+2.27	4.03	+1.58	3.27	+1.33	2.25	+0.11	34.81	-4.2
Harrisonville	0.99	-0.70	1.00	-1.16	1.46	-1.19	4.96	-1.63	2.86	-2.02	2.31	-2.36	1.95	-2.11	1.53	-2.58	6.15	+1.73	4.47	+1.88	2.40	+0.40	2.15	+0.29	32.23	-9.4
Lamar	0.80	-0.98	0.43	-1.98	2.00	-0.94	5.97	+1.89	1.65	-1.31	4.93	-0.16	1.36	-3.01	4.99	+0.72	4.17	-0.11	7.95	+5.09	6.45	+4.26	3.68	+1.72	46.78	+5.1
Lamonte	0.22	-1.76	1.38	-0.66	0.61	-1.91	3.24	-0.48	5.54	+0.57	4.64	+0.06	1.27	-3.05	3.67	+0.23	4.55	+0.09	2.70	+0.38	3.19	+1.19	3.36	+1.64	39.32	+1.2
Marshall	1.73	-0.25	1.68	-0.27	1.21	-1.44	3.91	+0.34	3.85	-1.17	3.28	-1.25	1.27	-3.01	2.22	-1.38	7.59	+2.68	1.95	-0.64	2.63	+0.48	2.20	+0.48	33.52	-5.4
Nevada	....	....	....	....	....	....	....	....	....	....	1.58	-3.96	1.77	-2.39	2.46	-0.94	5.73	+1.58	4.80	+1.89	4.77	+2.88	3.10	+1.18	....	....
Osceola	....	....	0.91	-1.16	1.29	-1.77	5.64	+1.53	2.48	-4.48	1.96	-3.26	2.91	-2.27	1.97	-0.84	5.66	+1.83	3.63	+1.44	5.20	+2.16	2.21	-0.69	....	....
Warrensburg	0.66	-1.09	1.16	-1.04	1.15	-1.38	3.84	+0.72	....	....	2.71	-2.10	1.87	-2.24	....	....	....	....	2.71	+0.14	....	....	....	....	....	....
Warsaw	1.95	-0.31	1.00	-1.80	1.25	-1.85	5.96	+1.94	2.57	-2.60	2.27	-3.16	2.11	-2.57	3.56	-0.42	6.41	+2.41	2.98	-0.05	4.91	+2.57	3.58	+1.14	38.55	-4.7
Waverly	0.58	......	1.63	......	0.67	......	4.00	......	4.61	......	1.74	......	2.14	......	2.18	......	5.74	......	1.94	......	2.75	......	1.53	......	29.91	.....
Northwest Plateau.																										
Avalon	1.55	-0.41	2.01	-0.13	0.35	2.53	3.15	-0.06	5.06	0.15	3.15	-1.41	1.55	-2.62	2.85	-0.68	3.80	-1.15	2.10	-1.08	3.70	+1.77	3.53	+2.01	32.83	-6.4
Bethany	1.20	-0.25	0.78	-0.78	0.32	-1.87	2.81	-0.12	6.16	+1.04	3.79	-0.45	2.17	-2.31	2.87	-1.12	2.78	-1.00	3.51	+1.30	2.51	+0.92	1.94	+0.44	30.87	-4.2
Chillicothe	1.21	-0.87	1.50	-1.03	0.40	-2.07	2.15	2.67	3.50	-2.00	2.83	-3.08	1.34	-3.81	2.32	-2.53	2.95	-3.53	3.65	-0.58	3.35	+0.87	4.19	+2.25	29.39	-19.0
Conception	0.50	[illegible]	1.24	-0.62	0.28	-1.32	1.72	-0.99	8.95	+1.25	2.85	-1.60	1.56	-2.79	4.50	+0.83	2.85	-0.92	3.09	+0.62	1.74	+0.16	1.71	+0.64	31.09	[illegible]
Gallatin	[illegible]	-0.39	0.94	-0.75	0.38	-2.25	2.98	-0.63	1.83	0.90	3.68	[illegible]	2.96	1.70	3.04	-1.12	2.63	-1.50	3.84	+1.24	3.13	+1.33	2.16	+0.61	32.22	-6.6
Grant City	0.60	-0.42	0.70	0.13	0.49	-1.46	2.40	-0.47	7.83	+3.11	2.38	-2.00	4.94	0.00	3.35	-0.25	3.82	-0.13	4.11	+1.34	2.34	+0.88	1.82	+0.57	31.78	+0.6
Kansas City	0.94	-0.19	1.53	-0.06	0.48	-2.34	2.87	0.42	3.77	-1.31	1.50	-3.16	1.82	-3.02	2.45	-2.30	7.29	+3.53	4.00	+1.79	4.61	+2.76	2.98	+1.62	34.24	-3 1.
[illegible]	0.69	-0.71	1.05	-0.58	0.32	-1.91	2.36	-0.43	5.02	-0.53	1.35	0.01	2.07	-2.01	2.11	-1.43	3.85	-0.18	3.57	+0.81	3.60	+1.90	2.37	+0.95	31.66	-4.2
Lexington	1.13	-0.53	1.94	-0.15	0.53	-1.78	3.35	+0.14	4.62	-0.56	1.59	-0.31	1.24	-3.81	1.73	-1.48	4.04	+1.16	1.88	-0.78	2.76	+0.89	1.76	-0.05	29.57	-6.8
Linneus	...	....	2.15	+0.21	0.82	-1.73	3.19	[illegible]	5.46	+0.31	1.32	-3.59	2.32	-2.28	1.92	-1.73	6.27	+1.98	2.88	+0.33	5.30	+3.60	3.67	+2.18	....	....
[illegible]	0.82	-0.37	1.92	[illegible]	0.17	-1.72	2.53	-0.17	8.15	+2.22	2.25	-2.29	1.78	-3.93	6.50	+2.41	2.47	-1.77	4.77	+0.64	2.55	+1.07	1.45	+0.29	35.36	-3.1
Oregon	[illegible]	[illegible]	0.72	[illegible]	0.14	-1.89	3.10	-0.15	1.21	-0.66	1.28	-3.46	1.88	-2.50	[illegible]	-1.66	1.84	-1.84	3.85	+1.26	2.46	+0.78	2.37	+0.86	21.89	-11.1
St. Joseph	0.66	-0.45	1.07	-0.27	0.31	-1.67	2.57	-0.30	6.71	[illegible]	1.30	-3.38	1.61	-2.27	3.28	-0.38	4.53	+1.18	3.10	+0.50	2.82	+1.07	1.97	+0.86	29.96	-2.7
Tarkio	0.42	-0.44	0.79	-0.27	0.01	-1.68	1.64	-1.32	6.27	+1.46	2.68	2.28	1.87	+1.03	[illegible]	0.44	3.00	-0.51	6.44	+2.93	2.40	+1.10	1.87	+0.88	34.12	[illegible]
Trenton	[illegible]	0.47	1.04	0.64	0.20	2.01	3.79	+0.93	7.21	+1.74	6.26	+2.27	1.84	-2.11	3.75	+0.15	2.26	-1.97	3.93	+1.41	3.44	+1.78	2.39	+0.85	37.20	+1.5

Monthly and Annual Mean Temperatures for the Year 1918, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain.																										
[illegible]	13.0	−13.8	32.4	+3.9	50.8	+9.7	48.8	−5.6	68.9	+3.6	76.6	+3.8	77.5	+2.3	82.2	+8.8	62.3	−3.8	59.6	+4.8	44.8	+3.6	37.2	+6.6	51.1	+2.0
Hill	11.8	−14.1	31.4	+7.1	51.2	+10.6	50.1	−3.2	69.0	+1.8	77.3	[illegible]	....	....	82.6	+6.7	62.3	−5.1	60.8	+3.9	46.0	+2.3	39.0	+8.3	....	......
[illegible]	15.4	−11.8	33.7	+3.6	50.9	+9.5	50.4	−4.9	68.8	+4.3	76.8	+2.5	77.2	+2.3	81.7	+7.6	61.4	−6.1	60.1	+5.5	41.9	+2.5	39.8	+6.9	55.0	+1.7
[illegible]	11.7	−15.7	31.1	+1.1	49.1	+7.4	48.6	−6.5	66.5	+5.3	77.6	+1.4	79.4	+2.0	85.1	+8.9	62.2	−6.2	59.9	+3.1	45.2	+0.6	37.3	+5.8	51.1	+0.7
[illegible]	14.8	−15.1	31.6	+2.4	50.6	+6.8	50.8	−3.0	69.1	+4.3	77.0	+4.3	77.2[a]	−0.7	82.5	+6.2	62.6	−6.2	61.0	+3.1	41.8	−0.5	39.8	+6.1	55.5	+0.7
nbal	13.6	−13.1	31.8	+2.7	49.1	+7.5	48.4	−1.2	68.5	+3.1	71.8	+1.5	76.2	−1.2	81.6	+6.6	61.2	−6.7	58.6	+2.7	44.4	+3.9	39.1	+7.8	51.0	+0.8
son City	15.1	+14.8	34.2	+3.4	51.2	+8.4	48.8	−7.0	68.6	+3.4	77.1	+3.1	77.8	−0.3	82.6	+8.9	....	.....	59.6	+2.9	45.7	−0.7	38.2	+5.2	....	......
sville	13.5	−11.4	30.0	+5.1	48.4	+9.8	47.2	−4.7	66.5	+3.9	74.6	+2.7	75.6	−0.8	80.0	+6.2	60.8	−5.2	58.7	+4.7	47.4	+3.1	36.8	+7.4	52.9	+1.8
siana	13.6	−14.3	32.8	+1.4	49.0	+6.7	48.8	−2.9	69.2	+5.6	71.5	+2.8	74.6	−1.4	80.7	+6.0	60.4	−8.5	58.2	+2.1	42.8	−1.3	30.2	+9.2	53.8	+0.7
n	....	......	29.6	+1.5	48.0	+5.8	48.4	−5.5	66.2	+2.1	76.0	+3.6	76.4	−1.6	80.2	+3.5	60.8	−7.6	58.1	0.8	42.5	−1.7	35.6	+5.1	....	......
co	13.0	−15.6	32.4	+3.7	52.3	+7.8	47.1	−6.9	67.6	+3.1	75.7	+2.1	75.9	−1.4	82.0	+5.9	60.5	−8.3	58.4	+1.9	41.2	+1.1	37.6	+5.4	53.9	−0.1
ll	18.4	−13.7	37.2	+5.1	52.3	+7.8	50.5	−5.1	69.6	+3.5	76.6	+2.0	77.2	−0.6	83.0	+6.2	62.3	−8.6	61.0	+2.1	46.2	0.0	32.6	+7.9	50.1	+0.7
ra	10.4	−18.0	31.0	+4.2	46.6	+7.2	46.7	−7.3	67.6	+1.2	77.8	+0.1	76.8	−2.3	82.0	+3.3	59.9	−8.7	57.0	−0.4	42.4[r]	−0.7	38.2	+8.0	52.8	−1.0
erne	13.6	......	30.2	......	48.6	......	47.5	......	66.3	......	75.4	......	76.2	......	80.4	......	61.2	......	58.8	......	45.4	......	37.0	......	53.3	......
ters	16.5	−14.7	35.6	+3.9	52.8	+9.3	50.2	−5.4	69.2	+6.8	75.6	+1.6	77.5	−0.2	82.0	+5.5	61.6	−5.6	61.6	+3.7	45.0	−0.3	42.4	+7.4	55.8	+1.0
Louis (1)	18.8	−12.2	35.6	+2.1	52.6	+9.1	51.2	−4.9	70.8	+4.3	77.2	+2.3	78.4	−0.7	82.6	+5.4	63.6	−6.4	62.3	+3.5	46.2	+2.8	43.0	+7.5	56.9	+1.1
Louis (2)	17.4	......	34.4	......	52.0	......	50.4	......	71.2	......	76.8	......	78.2	......	82.0	......	62.8	......	61.4	......	45.3	......	42.2	......	56.1	......
ville	12.1	−16.5	30.5	+3.2	49.4	+8.0	49.9	−3.3	66.6	+2.3	77.2[a]	+1.4	79.2	+2.0	84.4	+7.9	64.0	−4.7	60.2	+3.0	45.1	+1.3	38.9	+8.5	54.8	+1.4
nville	10.2	−13.1	26.2	+1.9	45.3	+7.9	46.2	−4.9	65.4	+2.8	72.8	+0.8	75.2	−1.5	79.3	+4.0	62.0	−5.3	57.2	+1.8	41.2	+1.2	36.0	+8.6	51.4	+0.4
renton	13.6	−15.6	32.4	+3.0	50.4	+8.9	48.0	−6.8	68.6	+5.5	75.0	+1.6	76.4	−1.2	81.8	+5.4	61.0	−7.8	58.6	+3.2	43.4	+0.5	39.2	+7.1	51.0	+0.2
Keokuk	12.4	−11.3	29.9	+3.2	47.5	+9.6	47.0	−5.0	67.8	+4.6	74.7	+2.2	76.3	−0.6	80.7	+6.2	61.3	−5.1	58.0	+3.7	43.8	+4.4	37.8	+8.4	53.1	+1.7
Southeast Lowlands.																										
ersville	24.8	−14.5	46.2	+8.2	58.6	+7.9	61.0	−1.1	75.7	+6.4	83.7[c]	+6.5	82.6	+2.5	86.1	+7.0	69.2	−3.9	67.4	+6.5	51.6	+1.9	49.1	+9.2	63.0	+3.2
pean	20.7	−16.4	41.6	+4.2	55.0	+5.8	57.2	−6.8	70.9	+4.1	78.1	+6.5	77.2	+2.5	82.2	+5.1	62.8	−8.5	62.0	+4.2	46.9	−1.1	44.2	+6.7	58.3	+1.0
son	15.9	−18.1	38.8	+3.8	54.0	+7.2	54.6	−2.4	70.2	+1.4	77.6	+3.5	76.8	+0.3	81.0	+5.0	62.8	−7.3	63.0	+5.4	46.8	0.0	43.8	+7.0	57.1	+0.7
Hill	19.3	−15.4	39.1	+4.2	56.8	+10.6	57.1	+0.6	68.5	+2.1	75.8	+1.6	77.0	−0.1	82.5	+5.8	65.8	−5.0	64.4	+6.6	48.4	+4.5	46.1	+10.2	58.4	+2.1
ar Bluff	19.2	−17.9	37.6[b]	+2.0	55.5[1]	+7.1	54.7	−5.5	69.2	+0.5	76.7	+0.8	77.0	−1.5	80.8	+2.7	63.1	−8.5	62.6	+2.1	48.6	+0.9	45.5	+8.6	57.6	+0.7
airo	21.0	−13.8	40.4	+2.8	53.8	+6.8	51.8	−3.5	71.2	+3.7	77.4	+2.2	78.0	−0.6	81.6	+4.6	64.1	−6.1	62.8	+3.7	47.8	+0.9	45.8	+7.3	58.2[f]	+0.7
Ozark Plateau																										
ad a	17.2	−15.1	36.6	+3.3	50.8	+6.2	52.0	−3.6	68.6	+1.0	72.1	0.0	74.6	−1.2	79.4	+4.9	58.8	−9.0	59.2	+3.2	41.8	+0.8	41.8	+7.6	54.7	−0.2
ee	19.0	−15.8	39.8	+5.6	51.8	+4.6	54.4	−2.7	69.0	+3.6	71.8[a]	−1.1	76.2	0.0	80.4[e]	+4.5	62.1[f]	−7.5	61.4	+3.4	44.0[c]	−2.0	43.6	+7.8	56.2	0.0
ivar	17.2	−17.4	37.2	+3.1	52.4	+6.8	51.4	−2.7	[illegible]	+2.9	78.3	+5.5	76.4	−0.7	81.4	+4.3	62.4	−7.7	61.8	+3.2	46.0	−1.2	41.6	+5.5	56.2	+0.1
sville	20.4	......	41.2	......	54.2	.....	54.2	......	70.2	......	....	......	75.8	......	80.6	.....	61.6	......	....	......	....	......	42.0	......	....	......
cker	22.5	−8.6	40.8[k]	+9.9	....	......	....	......	69.4[b]	−3.7	81.6[c]	−8.9	....	....	....	......	....	......	....	......	....	......	....	......	....	......
m	19.5[a]	−17.4	39.6[c]	+5.8	51.4[c]	+2.8	53.4[a]	−4.2	68.2	+2.2	77.0	−3.7	73.0[c]	−1.5	80.4[a]	+2.9	62.6[g]	−8.8	....	......	....	......	41.2[b]	+3.3	....	......
ton	16.1	−16.1	34.6	+2.9	49.9	+6.9	49.6	−6.8	66.8	+1.7	74.9	+1.3	75.3	−1.6	80.4	+3.9	61.2	−8.7	58.4	+0.3	43.6	−2.0	39.4	+4.5	54.2	−1.1
rmington	....	......	....	....	....	......	....	......	....	....	....	......	76.9[f]	.....	81.4	......	61.9	......	61.6	......	45.5	+1.6	43.0	+5.4	....	......
ono	17.8	−16.2	37.0	+2.6	52.4	+5.7	50.0	−6.5	68.2	+2.1	76.1	+3.0	75.2	−1.5	80.2	+3.8	60.8	−9.7	61.0	+3.0	44.8	−2.8	41.9	+6.2	55.4	−0.8
land	19.9	−13.0	37.3	+5.0	50.8	+6.2	51.6	−3.3	67.6	+2.7	73.8	+1.4	74.7	−0.8	78.0	+3.5	59.0	−8.7	59.6	+4.1	44.8	+0.1	41.0	+6.6	54.8	+0.3
ollister	22.6	−13.7	38.1	+0.2	49.0	+0.6	56.4	−3.7	66.4	−1.1	79.6	+3.8	78.0	−0.8	83.0	+5.3	65.0	−6.8	64.2	+4.3	50.3	+2.2	48.4	+8.7	58.4	−0.8
ston	20.0	−12.6	40.2	+8.0	54.2	+8.1	53.6	−2.4	68.6	+3.7	75.9	+3.7	74.9	−1.0	80.2	+3.1	61.6	−7.3	61.6	+4.5	46.3	−0.1	44.3	+8.3	56.8	+1.3
skong	21.3	−15.7	41.7[a]	+5.1	54.0[f]	+4.6	55.8	−2.2	70.0	+3.0	78.1	+3.5	77.1	−0.9	81.9	+4.3	64.5	−6.7	63.0	+3.2	47.0	−2.8	44.8	+7.3	58.3	+0.2
anon	15.2	−18.4	34.9	+1.0	51.2	+6.0	50.6	−5.7	68.2	+2.2	76.9	+3.5	74.7	−2.2	79.2	+2.8	59.6	−10.4	60.0	+1.8	43.5	−2.8	40.0	+4.6	54.5	−1.5
kwood	19.4	−14.7	39.2	+4.2	52.4[a]	+5.3	54.4	−2.2	68.1[c]	+3.6	78.6	+4.3	77.6	+0.5	81.6	+4.7	66.0	−6.0	62.6[t]	+4.0	46.2	−2.4	40.4	+4.5	57.2	+0.5
Mt. Grove	17.8	−16.2	37.8	+2.3	51.5	+5.4	50.7	−4.2	66.6	+2.2	75.1	+4.3	74.2	−1.8	79.0	+4.0	60.4	−8.6	60.3	+2.7	45.8	−5.5	40.9	+6.2	54.8	−0.6
osho	21.2	−14.2	41.2	+4.9	53.5	+5.8	56.2	−2.0	68.9	+2.6	78.2	+4.3	76.6	−1.0	81.3	+4.5	63.2	−7.5	62.2	+2.9	46.1	−1.3	42.0	+5.3	57.6	+0.4
ola	17.0	−14.5	35.4	0.0	51.4	+7.1	50.0	−5.5	70.0	+4.4	76.9	−4.2	75.8	−1.3	81.4	+6.0	63.6	−4.2	60.2	+5.0	46.9	+2.4	42.4	+8.9	55.8	+1.0
pringfield	18.4	−12.9	37.6	+4.0	52.6	+9.1	51.8	−3.9	68.6	+4.0	77.0	+4.7	76.2	−0.2	80.0	+5.2	62.8	−5.1	61.6	+4.5	45.3	+0.9	41.3	+5.8	56.1	+1.3
Southwest Plain.																										
moore	17.9	−13.5	35.3	+1.8	51.8	+9.5	51.2	−4.2	68.7	+4.9	80.9	+7.6	79.2	+1.9	84.2	+7.9	63.4	−5.6	61.4	+4.4	44.4	−1.9	37.6	+4.7	56.3	+1.5
ton City	18.5	−13.3	36.5	+4.8	53.1	+9.2	51.9	−4.2	69.2[d]	+3.9	81.0	+6.3	78.6	+1.9	84.3	+6.7	64.2	−6.5	63.0[a]	+3.9	46.6	+0.5	40.3	+6.0	57.3	+1.6
ter	16.9	−14.8	35.9	+4.5	52.2[c]	+8.9	52.4	−3.6	71.5	+6.3	80.6	+7.5	78.4	+1.4	83.2	+6.5	63.6	−6.8	63.1	+4.7	46.5	−1.1	40.2	+5.6	57.0	+1.6
sonville	14.1	−13.3	32.6	+3.1	49.3	+8.8	48.8	−5.5	67.8	−3.7	78.8	+5.4	77.8	+0.1	83.7	+8.1	61.6[a]	−6.9	60.0	+4.0	43.8	+1.4	36.6	+5.2	51.6	+1.2
amar	19.2	−13.5	39.6	+5.5	52.8	+7.1	53.0	−4.0	70.0	+4.0	79.8	+5.4	78.2	−0.2	82.8	+5.5	64.0	−6.7	62.8	+1.6	46.5	−0.2	40.6	+5.1	57.4	+1.0
amonte	14.2	−15.1	33.8	+2.6	50.4	+7.3	49.0	−7.3	67.6	+2.1	78.0	+3.3	77.4	−2.1	83.7[c]	+7.2	62.2	−8.8	60.0	+1.8	45.0	+0.4	38.1	+3.0	55.0	−0.5
sall	14.9	−12.8	34.1	+5.1	50.7	+8.9	49.9	−4.9	68.0	+3.8	78.2	+5.3	78.3	+1.3	83.4[a]	+7.9	62.6[c]	−5.7	59.9[a]	+3.3	44.3[a]	−1.7	37.5	+5.8	55.2	+1.4
evada	....	......	....	....	....	....	....	......	....	......	80.5	+7.1	79.4	−1.1	84.0	+7.2	64.0	−5.1	62.4	+5.6	46.7	+2.6	40.4	+6.5	....	......
ensburg	17.1	−11.8	34.7	+3.6	52.6	+9.5	50.4	−6.0	....	......	80.6	+6.5	79.5	+1.4	....	......	....	....	61.7	+3.5	....	......	....	......	....	......
saw	17.2	−16.6	35.6	+2.3	53.7	+7.5	54.6	−1.8	71.3	+5.3	79.3	+5.6	77.0	−1.2	82.5	−5.1	61.8	−8.8	61.7	+2.6	46.2	−2.1	40.4	+5.3	56.8	−0.6
Northwest Plateau.																										
valon	16.2	−12.4	32.6	+3.8	49.6	+8.3	50.6	−3.1	68.8	+5.5	78.8	+5.7	80.2	−1.3	83.4	+6.8	62.8	−6.8	61.6	+3.1	46.7	+2.9	39.2	+6.8	55.9	+1.6
thany	11.8	−12.9	29.2	+3.0	47.9	+9.0	48.0	−3.2	69.2	+6.8	77.2	+5.3	77.3	+1.6	83.0	+8.3	62.5	−3.9	59.6	+5.3	42.6	−0.8	35.4	+4.5	53.7	+1.9
llicothe	10.4[j]	−19.6	29.0	−2.8	49.2	+8.8	47.9	−6.6	67.6	+6.5	77.6	+3.8	77.6	......	81.8	−5.9	61.6	−8.8	59.7	+0.4	43.3	+0.9	40.1	+3.2	53.8	−1.7
nception	13.8	−11.0	29.8	+3.4	49.0	+10.6	47.3	−5.0	68.6	+6.9	77.2	+6.1	77.3	+1.4	82.4	+8.3	62.0	−5.0	58.4	+3.0	42.8	+1.4	35.6	+5.9	53.7	+2.2
ant City	13.6	−11.0	29.4	+2.8	48.4	+8.5	47.5	−4.8	67.8	+5.7	76.0	+5.1	76.9	+1.3	79.8	+4.8	61.7	−5.3	58.8	+3.6	41.8	−1.0	35.1	+7.1	53.1	+1.4
ansas City	17.4	−8.9	34.0	+4.1	50.8	+10.0	49.3	−5.0	69.1	+4.6	80.0	+7.0	78.8	+1.2	83.8	+8.0	63.8	−3.7	61.4	+5.6	45.6	+4.1	39.4	+7.9	56.1	+2.9
ider	14.6	−11.9	33.6	+6.9	50.4	+10.0	49.2	−3.7	69.0	+6.0	77.6	+5.5	77.6	+0.9	82.2	+6.7	62.3	−5.2	60.6	+4.4	44.2	+1.9	38.0	+8.5	54.9	+2.5
xington	16.6	−10.9	34.3	+5.3	51.1	+8.7	49.8	−4.8	69.4	+4.9	78.5	+5.8	78.6	+1.8	83.6	+7.8	63.0	−5.6	61.2	+3.6	44.4	+0.4	38.4	+6.7	55.7	+2.0
erty	....	......	37.8[h]	+8.4	52.2	+10.1	50.8	−4.7	70.1[a]	+5.4	80.0	+6.3	78.5	+0.8	85.2[k]	+8.6	64.0	−5.5	61.0	+3.6	48.6[e]	+4.9	35.4[i]	+3.5	....	......
ryville	10.8	−11.4	25.8	+2.5	45.4	+9.1	45.6	−5.0	65.7	+4.7	74.7	+5.8	75.9	+0.4	78.8	+5.1	58.6	−6.8	56.8	+3.6	39.6	+0.6	32.7	+6.4	50.9	+1.2
regon	13.8	−10.0	26.9	+0.9	46.7	+7.8	45.2	−7.5	66.5	+3.2	76.8	+4.5	76.8	+1.4	80.5	+5.4	60.0	−7.1	58.0	+3.1	41.8	+1.6	34.9	+6.4	52.5	+0.8
t. Joseph	15.6	......	31.8	......	49.7	......	49.0	......	69.4	......	79.2	......	78.6	......	82.6	......	62.8	......	60.1	......	43.7	......	37.2	......	55.0	.....
arkio	14.6	−7.4	29.4	+2.6	47.2	+8.4	47.9	−5.4	68.4	+4.8	77.4	+4.6	76.6	−0.2	86.0	+4.1	61.6	−4.6	58.6	+3.1	42.2	+2.1	35.2	+10.0	53.3	+1.8
renton	15.6	−11.4	29.4	+1.7	47.9	+7.7	48.3	−4.9	67.8	+3.9	76.4	+4.0	77.2	+0.7	80.9	+5.8	61.5	−6.0	59.3	+2.8	43.1	+0.5	35.9	+6.1	53.6	+0.9

Monthly Maximum Temperatures for the Year 1918, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date	Maximum	Date
Northeast Plain.																								
Brunswick	48	4	71	24	88	13	80	1	90	8	102	17	104	27	108	4	84	15	[illegible]	5	78	6	[illegible]	5†
Clifton Hill	48	4†	67	24	88	13	80	1	91	30	103	17	......	......	[illegible]	4	[illegible]	[illegible]	[illegible]	5	77	6	[illegible]	8
Columbia	44	1	69	23	90	13	83	2	90	30	101	17	102	[illegible]	108	4	[illegible]	1	[illegible]	5	77	6	67	5
Fayette	44	4	66	23	88	13	79	1	90	9	104	17	[illegible]	27	[illegible]	4	[illegible]	1	[illegible]	5	77	6	64	5†
Fulton	45	4	73	25	89	13	85	2	90	30	103	17	106	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	77	6	71	5
Hannibal	42	1	68	23	89	13	77	1	90	30	101	16	[illegible]	26	[illegible]	3	[illegible]	1	[illegible]	[illegible]	76	6	67	9
Jefferson City	47	25	72	23	89	13	82	2	90	30	101	11†	104	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	77	6	[illegible]	6†
Kirksville	41	4	66	21	84	13	78	1	86	9†	101	16	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	76	6	[illegible]	5
Louisiana	43	6	64	21†	84	11	75	1†	88	28	100	16	100	[illegible]	[illegible]	5	78	[illegible]	[illegible]	6	67	6†	[illegible]	9
Macon	......	......	67	8†	89	13	82	1	91	30	105	16	105	[illegible]	[illegible]	4	[illegible]	1	[illegible]	6	85	6	[illegible]	5†
Mexico	43	4†	70	23	88	13	81	2	91	30	106	16	104	[illegible]	[illegible]	6	87	1	[illegible]	5	76	6	67	6
Oakfield	52	25	73	23	88	13	81	2†	90	30	104	17	102	[illegible]	110	[illegible]	84	1	[illegible]	6	[illegible]	6	74	9
Palmyra	42	1	66	23	87	13	77	1	90	30	103	16	[illegible]	[illegible]	[illegible]	3	[illegible]	14	[illegible]	5	[illegible]	7	67	17
St.Catherine	43	4	65	24	84	13	75	1	86	25	101	11†	100	28	[illegible]	4	[illegible]	[illegible]	[illegible]	1	[illegible]	6	69	5†
St.Charles	47	25	71	23	87	13	81	16	90	30	101	16	102	[illegible]	[illegible]	4	86	1	[illegible]	5	[illegible]	6	74	9
St.Louis(1)	45	25	70	19	84	13	81	16	90	30	100	16	100	26	[illegible]	4	[illegible]	1	[illegible]	5	[illegible]	6	73	9
St.Louis(2)	43	25	69	14†	85	13	81	16†	91	30	99	16	100	26	[illegible]	4†	[illegible]	[illegible]	[illegible]	[illegible]	75	6	74	9
Steffenville	44	4	76	25	88	13	80	1	91	25†	106	16	[illegible]	26	111	4	94	[illegible]	[illegible]	[illegible]	75	6	65	9
Unionville	45	4	70	21	85	13	80	1	90	30	100	16	102	[illegible]	[illegible]	5	86	1	[illegible]	[illegible]	77	6	58	5†
Warrenton	42	25	74	23	90	13	84	2	92	30	102	16	102	[illegible]	109	5	85	1	[illegible]	5	77	6	70	5
Keokuk	41	4	65	23	83	13	75	1	[illegible]	25	101	16	97	[illegible]	[illegible]	4	83	1	85	5	75	6	66	9
Southeast Lowlands.																								
Caruthersville	60	25	82	28	87	22	92	2	100	30	[illegible]	17	104	25†	111	11	91	14	94	[illegible]	82	4†	79	10
Doniphan	53	26	83	25	82	22	87	2	92	30	102	17	104	27	109	4	85	[illegible]	86	5	72	6	71	10
Jackson	57	26	82	28	86	22	82	2	91	28†	103	17	102	25	107	3	87	[illegible]	92	6	78	5†	71	8†
Marble Hill	69	25	80	25	95	30	90	6	98	31	99	16	100	26	106	4	95	[illegible]	91	6	84	11	[illegible]	6
Poplar Bluff	59	26	81	25†	84	22	85	2	92	28	102	17	102	6	108	5	87	14	87	2	78	8†	77	10
Cairo	53	25	78	28	81	22	80	2	91	30	100	17	95	24	102	3	84	14	87	5	71	6	71	10
Ozark Plateau																								
Arcadia	55	25†	77	25†	83	5†	81	16	89	30	101	17	103	[illegible]	107	3	81	1	89	6	74	5†	73	6†
Birchtree	60	26	80	24	83	5†	89	2	88	30	102	17	102	27	107	1	82	13	89	6	75	4	74	9
Bolivar	47	25	67	24	78	20†	77	1†	88	8†	103	18†	102	27	102	3†	92	14	88	5	76	6	70	8
Cassville	63	26	79	24	84	13	89	2	92	8	......	......	103	25†	105	3†	90	3	......	......	......	......	70	9
Crocker	67	29	77	12	......	......	......	......	83	17†	102	17	......	......	......	......	......	......	......	......	......	......	......	......
Dean	62	26	79	24	83	13	88	2	91	8	103	25	104	28	106	4	91	14	87	5	......	......	80	9
Eldon	48	4	79	23	88	13	89	2	91	8	102	17	102	27	106	4	86	1	95	7	73	6	70	5
Farmington	......	......	......	......	......	......	......	......	......	......	......	......	99	28	105	5	86	16	88	5	72	3†	72	9
Gano	53	25	71	24†	85	13	82	2	91	30	100	16†	98	26	106	4	85	13	90	6	76	6	72	8†
Goodland	58	25	75	24†	83	13	81	16	90	30	101	17	103	27	108	3†	82	11	89	6	75	3†	75	5†
Hollister	......	......	76	26	81	28	81	2	91	8†	101	18†	106	28	110	11	85	2†	88	6	78	3†	78	10
Houston	60	26	77	21	82	5	87	2	87	30	102	17	102	27	101	4	82	11	87	5	75	6	77	10
Koshkong	60	25	85	24	......	......	90	2	90	7†	101	17	103	27	106	11	84	1†	88	5†	75	6	74	9
Lebanon	48	4†	74	23†	87	8	90	2	90	7†	102	18†	101	28	104	4†	82	2†	85	6	75	6	79	5
Lockwood	50	4	72	24	81	20	86	2	91	8	100	[illegible]	101	27†	103	4	91	14	87	6	75	6	70	8
Mt. Grove	60	26	76	24	83	13	87	2	87	8†	100	18	98	27	104	4	83	14	87	5	74	6	70	9
Neosho	62	26	76	24	83	13	87	2	90	8†	100	24	101	28	104	3†	90	2†	87	5†	76	6	70	8
Rolla	53	25	74	23	87	13	83	2	93	28	103	17	102	27	106	5†	86	14	90	7	75	4	72	5
Springfield	55	26	72	23	82	13	86	2	89	8	99	13	99	27	101	4	89	14	85	5	73	6	68	8
Southwest Plain.																								
Amoret	48	4	71	24	95	13	86	2	91	27†	110	20	105	7†	111	3	93	14	92	5	73	5	70	8
Appleton City	54	4	70	24†	88	13	86	2	88	8†	105	18†	104	27†	107	3†	91	14	91	5	75	5	69	8
Clinton	49	4	71	8	89	13	83	1	92	8	105	11†	104	27†	107	3	91	14	92	5	72	5	72	8
Harrisonville	50	1	72	21	79	21	79	1	89	8†	106	20	110	27	110	3	88	2†	92	5	74	5	68	8
Lamar	51	4†	75	21	84	13	88	2	91	8†	104	19†	105	28	109	3	95	14	91	5	76	4†	71	8
Lamonte	49	4	69	8†	88	13	80	2	90	30	105	20	104	27†	110	3	96	1	90	5	76	6	70	8
Marshall	45	4	69	8	89	13	79	1	89	30	104	20	107	27†	110	4	89	1	88	5	77	6	65	8
Nevada	......	......	......	......	......	......	......	......	......	......	103	18†	103	26	108	3	92	14	90	5	75	5	71	8
Warrensburg	48	4	70	8	89	13	82	1	......	......	106	20	107	27	......	......	......	......	91	5	......	......	......	......
Warsaw	54	24	75	24	92	13	93	2	96	8	105	20	106	26	109	3†	90	14	92	5	77	6	73	8
Northwest Plateau.																								
Avalon	45	4	66	21	86	13	80	1	87	19†	101	17	106	27	111	4	90	28	89	5	75	6†	62	5
Bethany	46	2	73	11	82	13	81	1	90	19	103	16	104	28	109	4	86	1†	87	5	72	6	60	9
Chillicothe	48	4	68	24	87	13	81	1	89	25	105	17	107	27	110	4	88	14†	95	6	74	5	64	5
Conception	52	24	72	23	83	13	76	1	91	8	103	17	103	27†	109	4	87	13	88	4	72	5†	62	9
Grant City	52	24	67	23	82	13	80	1	90	4	103	16	104	28	110	4	87	13	89	15	65	5†	58	8†
Kansas City	51	24	69	23	82	13	78	1	89	30	103	20	102	28	108	3	87	13	87	5	73	5†	67	8
Kidder	55	1	72	11	85	13	80	1	89	19	103	17	102	28	107	4	86	11	88	5	72	4	70	5
Lexington	47	5	70	8	86	13	80	1	89	30	105	20	104	26†	109	4	86	11	87	4†	74	5	65	6†
Liberty	......	......	71	24	81	13	82	1	93	8	106	20	104	27†	109	3	88	13	89	4	81	8	60	16
Maryville	54	24	72	23	82	13	78	1	91	8	101	11†	102	28	110	4	85	14	87	3†	72	5	60	8
Oregon	50	1	69	23	80	13	73	1	89	8†	102	11†	100	28	110	4	82	13	88	4	72	5	61	5†
St. Joseph	52	24	71	23	84	13	79	1	92	8	104	11	101	27	109	3	88	13	88	4	74	5	63	8
Tarkio	55	21	72	23	81	18	79	1	92	8	102	11†	97	28	107	4	87	13	89	4†	71	5†	61	5†
Trenton	45	21	62	11	83	13	75	1	87	9†	99	16	100	27	104	4†	82	1†	84	4	72	6	58	8†

† Also on other dates.

Monthly and Annual Mean Temperatures of Each Section for the Year 1918, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
Northeast Plain	14.2	−11.1	32.5	+7.1	49.7	+8.3	49.0	−5.2	68.2	+3.8	75.9	+2.6	77.0	−0.4	81.9	+6.2	61.7	−6.4	59.5	+3.0	44.1	+1.2	39.0	+7.2	51.5	+1.0
Southeast Lowlands	20.3	−16.2	40.6	+1.2	55.6	+7.5	56.6	−1.8	71.4	+3.8	78.3	+3.0	78.1	−0.1	82.4	+5.0	64.7	−6.6	63.7	+4.8	48.1	+1.2	45.9	+8.2	58.8	+1.4
Ozark Plateau	19.8	−11.9	38.1	+3.5	51.9	+5.7	52.7	−4.0	68.4	+2.6	76.6	+3.4	75.9	−1.0	80.5	+4.2	62.1	−7.7	61.3	+3.3	45.6	−0.9	42.2	+6.3	56.1	0.0
Southwest Plain	16.7	−13.9	35.3	+3.7	51.8	+8.5	51.2	−4.6	69.3	+4.2	79.8	+6.0	78.4	+0.2	83.5	+6.9	63.0	−6.8	61.5	+3.6	45.6	−0.2	39.4	+5.2	56.4	+0.9
Northwest Plateau	14.1	−11.6	31.2	+3.4	48.2	+9.0	48.3	−4.9	68.4	+5.3	77.7	+5.3	77.7	+1.0	82.0	+6.6	62.1	−5.8	59.6	+3.7	43.2	+1.2	36.6	+6.4	54.0	+1.5
State	16.4	−14.0	34.9	+4.6	50.9	+7.8	50.8	−4.4	68.3	+3.8	77.2	+3.9	77.1	+0.2	81.8	+5.8	62.3	−6.7	60.6	+3.5	41.9	+0.5	40.0	+6.6	55.5	+0.9

Monthly Minimum Temperatures for the Year 1918, with Dates.

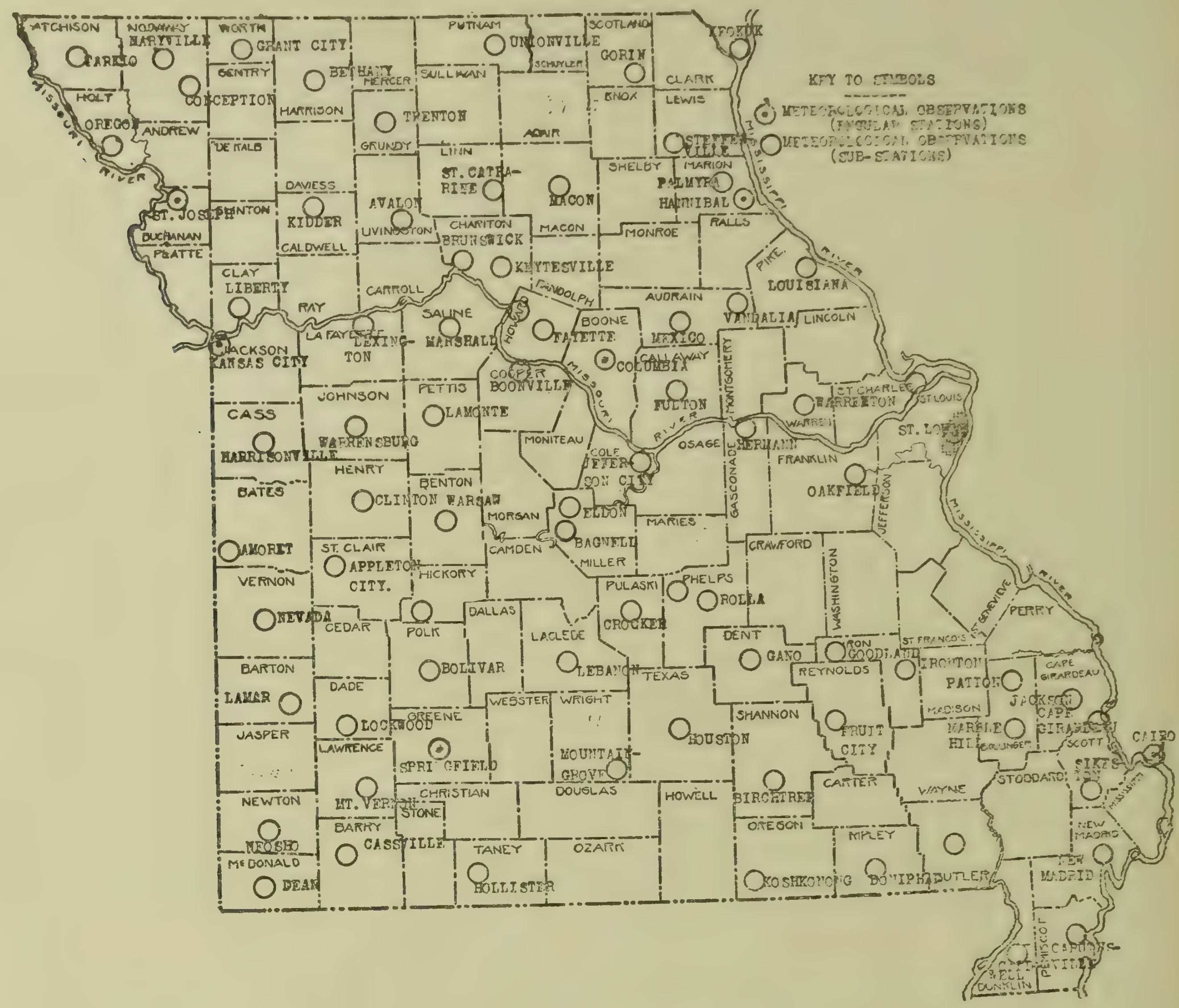
STATIONS.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
Northeast Plain.																								
[illegible]	−20	12†	−9	1	26	1	27	10†	36	1	76	8†	53	1	54	31	38	26	35	25	21	25	−3	26
[illegible] Hill	−21	12	−7	1†	16	10	26	16	36	1	54	8	53	31	53	1	35	29	34	25	20	26	−3	26
[illegible]	−19	12	−4	1	19	10	28	10	35	1	54	22	55	1	56	31	36	24	34	31	23	25	2	26
[illegible]	−23	12	−8	2	17	10	27	10	37	1	56	22	54	31	55	31	37	20	30	31	20	25	−1	26
[illegible]	−22	12	−10	2	18	10	28	10†	33	1	53	22	48	31	52	1	31	21	30	31	21	26	−3	26
[illegible]	−20	12	−9	4	15	10	28	10	35	1	54	8	54	9	55	31	35	20	35	31	22	26	1	26
Jefferson City	−20	12	−3	2	13	16	27	12	39	1	57	22	55	31	58	31	38	20†	36	31	22	25	0	26
[illegible]	−22	12	−13	1	14	10	24	10	31	1	54	7†	50	1	49	31	31	26	32	25	17	24†	1	26
[illegible]	−20	12	−15	2	18	10	29	10†	31	1	57	8	46	31	56	1	33	21	34	14†	20	25	−4	26
Macon	......	......	−11	4	13	10	26	10†	36	1	53	22	54	10†	57	31	33	21	33	25	19	25	−1	26
Mexico	−22	12	−7	2	15	10	26	10	35	1	53	8	50	31	51	1	35	20†	[illegible]	25	21	24†	−1	26
[illegible]	−21	12	−1	4	18	10	26	16	34	1	56	22†	55	1†	56	31	36	20	36	31	22	25	10	26
[illegible]	−22	12	−11	1	11	10	26	10	35	1	58	8	51	31	54	31	34	21†	34	24†	19	26†	1	26
[illegible]	−25	12	15	1	15	10	25	10	41	1	53	22	53	31	55	31	33	20	35	28†	18	25	−6	26
St. Charles	−29	12	−2	2†	20	10	28	10	34	1	57	7†	52	31	57	31	37	21	37	31	21	25	12	27
St. Louis D	−17	12	2	4	22	10	30	10	43	1	58	23	55	31	62	31	42	20	41	31	27	25	11	26
[illegible] 2	−18	12	1	4	21	10	30	10†	38	1	55	23	55	1	41	31	41	20†	40	31	26	25	14	26
[illegible]	−24	12	−18	1	14	10	26		44	1	50	8	51	31	47	31	33	20	22	25	19	25†	12	26
[illegible]	−20	12	−21	1	10	1	22	9†	40	1	48	22	50	10†	52	30†	32	21	32	25	15	20	1	26
[illegible]	−21	12	−4	1	18	16	27	10†	35	1	55	22	55	31	53	1	36	20	35	31	22	25†	5	26
Keokuk	−21	12	−13	4	17	10	29	5	37	1	53	22	55	1	55	31	37	20	35	31	20	21	6	26
Southeast Lowlands.																								
Caruthersville	−15	12	14	1	30	10†	32	9	41	1	69	11	79	1	62	2	44	21	41	25	26	30	13	26
[illegible]	−16	13	10	1	25	11†	32	13	55	2	74	23	75	13	52	1	58	22	57	31	25	30	13	26
[illegible]	−18	12	0	5	23	11†	29	9†	35	1	53	12	49	9	45	2	34	21	35	15	22	30	16	29
Marble Hill	−17	12	5	2†	23	17	29	9	33	1	53	15†	52	12	51	1	34	22	39	16	21	30	15	26
Poplar Bluff	−18	12	6	1	26†	17	31	9†	35	1†	53	23	53	1	45	1	35	22	40	16†	24	30	14	25
Cairo	−16	12	9	4	27	10	30	9	40	1	57	23	60	9	64	1	41	21	42	31	29	30	18	26
Ozark Plateau.																								
[illegible]	−20	12	−1	2	19	16	27	10	29	1	51	[illegible]	50	31	47	1	33	21	37	14†	22	30	11	26
[illegible]	−19	12	2	2	21	10	29	10	35	1	55	2	53	1	54	1	37	19†	36	28	24	30	8	26
[illegible]	−20	12	0	1	19	10	26	16	34	1	55	13	53	1	53	31	33	21	35	31	23	30	0	25
[illegible]	−18	12	4	1	23	10	26	11	54	2	......	......	41	1	55	1	41	21	......	......	......	......	1	26
[illegible]	−21	12	1	1	......	......	......	......	......	......	51	23	......	......	......	......	......	......	......	......	......	......	......	......
[illegible]	−21	12	2	1	20	10	23	10	29	1	53	13	52	2	53	1	31	21	......	......	......	......	7	26
[illegible]	−22	12	−3	1	16	10	23	10	34	1	52	22	51	11	53	31	33	20	34	30†	20	25	−3	25
Farmington	......	......	......	......	......	......	......	......	......	......	......	......	51	13	60	31	37	21	37	31	24	25	13	26
[illegible]	−22	12	1	1	18	10	26	10	32	1	53	13†	52	11	57	31	31	21	35	31	20	30	7	25
[illegible]	−20	12	0	2	20	10†	27	10	29	1	49	23	46	13	46	1	32	21	33	31	20	30	7	26
Hollister	......	......	8	1†	24	9	25	10	30	1	52	3	52	2	42	3	38	23†	28	31	25	29†	18	27
[illegible]	−19	12	4	1	21	19	28	19	32	1	54	13	52	11	54	1	34	21	35	30	21	30	9	26
[illegible]	−17	12	7	1	......	......	30	10	36	1	56	23	55	13	57	1	39	21	36	28	25	30	11	26
[illegible]	−21	12	−2	1	19	10	26	10†	33	1	55	13	53	10	54	1	34	20†	35	30	20	30	2	26
[illegible]	−19	12	−1	1	20	10	28	10	37	1	59	13	55	1	55	31	36	21	26	31	25	24†	3	26
[illegible] Grove	−19	12	1	1	19	19	25	11	31	1	54	13	51	1	55	1	35	21	[illegible]	31	23	30	7	26
[illegible]	−19	12	2	1	21	16	24	11	35	1	52	22	49	1	55	31	33	21	32	30	19	30	−1	26
[illegible]	−21	12	−2	1	19	10	27	11	32	1	57	22	50	9	55	1	36	20	25	31	21	30	5	26
Springfield	−19	12	1	1	22	19	30	10	29	1	61	22	57	10	57	31	33	20	33	31	25	30	9	26
Southwest Plain.																								
[illegible]	−23	12	−8	1	21	7	25	19	33	1	51	8	53	1	50	31	34	20	35	25†	21	25	−6	26
Appleton City	−21	12	−4	1	20	10	28	10	33	1	49	22	54	1	56	31	36	21	36	31	23	25	−3	26
Clinton	−19	12	−5	1	20	10	28	16	31	1	57	22	53	1	54	31	34	21	35	29	22	30	5	25
Harrisonville	−19	12	−10	1†	18	10	28	16†	34	1	54	8	52	1	53	31	35	21†	35	28	18	25	0	25†
Lamar	−21	12	−2	1	21	10	29	1	35	1	54	13	53	1	55	31	34	21	35	30	21	30	0	26
[illegible]	−21	12	−9	1	19	10	24	16	[illegible]	1	52	13	51	9†	53	1	33	20†	34	30	20	25	−5	26
Marshall	−20	12	−8	1	18	10	26	10	31	1	51	8	51	9†	57	21	34	20	33	31	19	24	−1	26
[illegible]	......	......	......	......	......	......	......	......	......	......	59	13	55	11	53	31	35	21	37	31	22	25	2	25
Warrensburg	−20	12	−8	1	19	10	27	10	......	......	56	8	57	1†	......	......	......	......	35	31	......	......	......	......
Warsaw	−22	12	−4	1	18	10	22	10	30	1	50	13	50	11	52	31	32	21	32	30	20	25	−12	26
Northwest Plateau.																								
[illegible]	−22	12	−13	1	17	10	25	10	43	1	55	7†	55	31	53	31	35	20	33	25	20	24	6	26
Bethany	−22	12†	−25	1	8	1	13	11	28	1	50	8	50	1	45	31	29	21	36	25†	14	25†	2	25†
Chillicothe	−20	12	−16	1†	15	10	23	10	33	1	50	8	52	1	50	31	31	21	30	27	18	24†	20	26
Conception	−23	12	−15	1	8	10	25	19	37	1	52	7†	55	30	52	31	35	20	30	25	16	24	0	25
Grand City	−21	12	−20	1	13	10	24	11	33	1	51	7	53	1	51	31	33	21	31	25†	15	29	1	24†
Kansas City	−16	11	−9	1	19	16	31	24	44	1	55	7	60	8	66	29	40	20	36	31	23	24	6	25
[illegible]	−21	12	−14	1	18	10	23	10	37	1	51	7†	54	30	51	31	34	20	32	25	18	29	9	25†
Lexington	−19	12	−10	1	19	10	27	10†	39	1	55	8	51	1	53	31	35	21	33	28	19	24	0	26
Liberty	......	......	......	......	16	10	25	10	36	1	51	8	......	......	51	31	35	21	32	28	......	......	−1	26
Maryville	−23	12	−20	1	12	11	23	10	31	1	49	22	51	1	48	31	52	20†	25	28†	12	30	−3	25†
Oregon	−21	12	−17	1	13	10	25	10	36	1	51	7†	53	30	48	31	33	20	29	28	15	24†	−2	25
St. Joseph	−19	12	−13	1	17	10	30	11	40	1	56	22	56	1	54	31	34	21	24	31	21	24	3	25
Tarkio	−20	11	−17	1	11	1	25	9†	31	1	50	22	53	11	50	31	30	21	29	28	15	24†	0	25
Trenton	−20	12	−15	1	17	10	26	9†	34	1	52	7	55	30	52	31	35	20†	32	28	19	24†	5	26†

† Also on other dates.

Monthly and Annual Precipitation of Each Section for the Year 1918, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northeast Plain	1.21	−1.01	1.38	−0.81	0.56	−2.26	4.69	+1.27	5.31	+0.54	3.04	−1.31	1.62	−2.41	3.54	+0.22	4.06	+0.77	2.70	+0.20	2.67	+0.47	2.31	+0.42	34.59	−4.25
Southeast Lowlands	4.26	−0.66	0.99	−2.50	0.84	−3.33	6.19	+2.03	8.50	+4.04	3.02	−1.20	0.62	−3.42	3.46	−0.26	5.57	+2.02	3.95	+1.01	3.40	+0.28	6.62	+3.51	46.96	+1.09
Ozark Plateau	2.15	−0.52	0.66	−1.93	1.86	−1.69	6.64	+2.46	5.32	+0.70	4.13	−0.70	1.77	−2.36	4.18	+0.07	4.42	+0.60	3.74	+1.02	3.74	+0.76	3.71	+1.22	41.84	−0.06
Southwest Plain	1.16	−0.73	1.00	−1.30	1.24	−1.53	4.26	+0.08	3.61	−1.62	2.69	−2.24	1.99	−2.57	2.46	−1.22	5.42	+1.28	3.80	+1.21	3.67	+1.57	3.01	+1.15	34.80	−4.62
Northwest Plateau	0.93	−0.45	1.29	−0.36	0.36	−1.88	2.71	−0.44	5.92	+0.80	2.95	−1.74	2.26	−2.28	3.14	−0.79	3.67	−0.42	3.65	+0.88	2.96	+1.26	2.41	+1.00	32.01	−4.72
State	1.68	−0.71	1.11	−1.26	0.94	−2.05	5.10	+1.24	5.19	+0.68	3.15	−1.36	1.76	−2.49	3.34	−0.22	4.73	+0.77	3.37	+0.71	3.18	+0.79	3.21	+1.14	37.16	−2.64

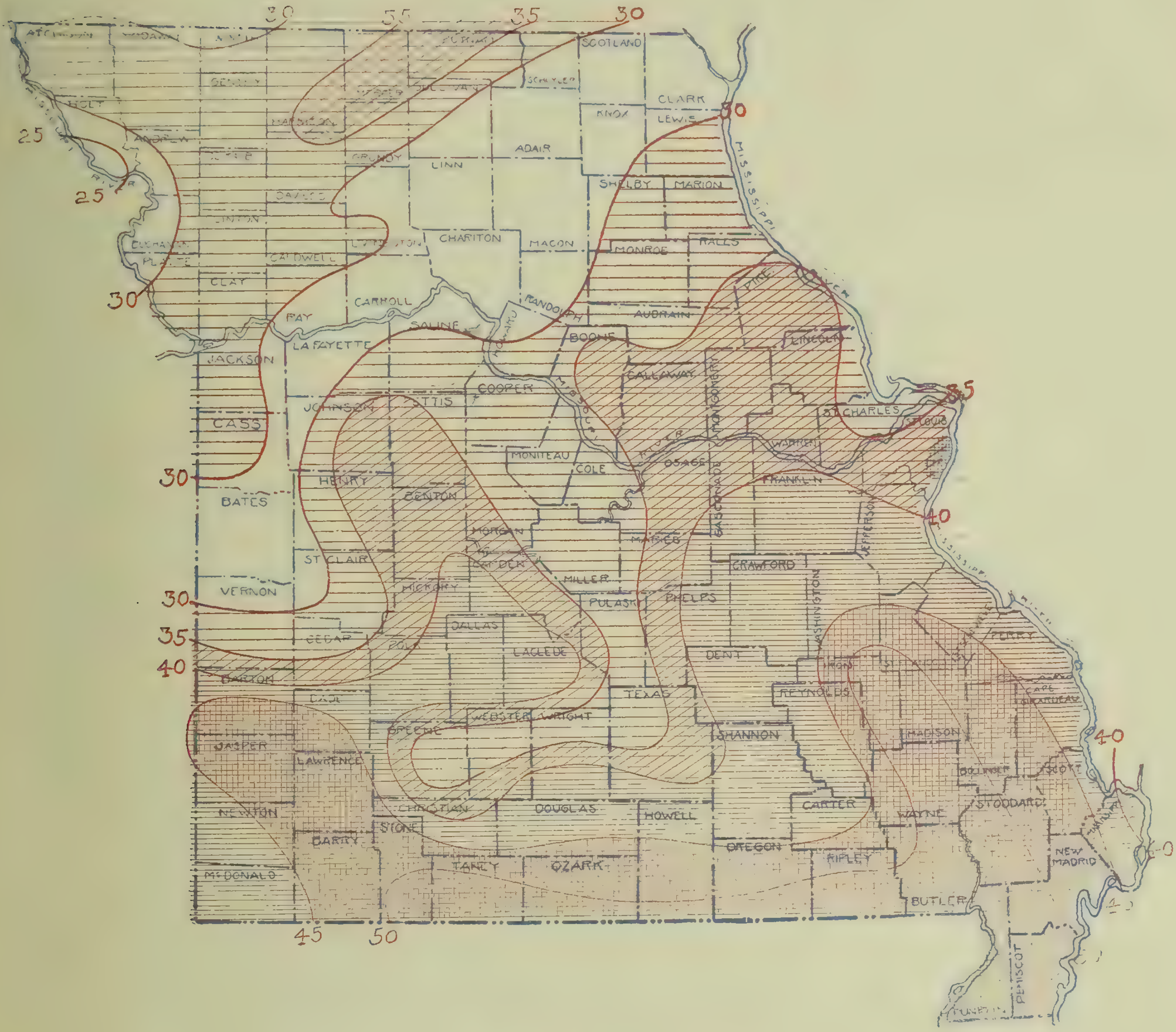
OBSERVATION STATIONS


KEY TO SYMBOLS
METEOROLOGICAL OBSERVATIONS (REGULAR STATIONS)
METEOROLOGICAL OBSERVATIONS (SUB-STATIONS)
MISSOURI RIVER
MISSISSIPPI RIVER
CAIRO

CO-OPERATIVE OBSERVERS.

Stations.	Name.	Stations.	Name.	Stations.	Name
Amoret	Darby Fruit Farm.	Gorin	J. W. Pulliam.	Nevada	George A. Kaupp.
Appleton City	W. G. Bigelow.	Grant City	W. H. Campbell.	New Madrid	Miss Josie Smith.
Arcadia	Arcadia College.	Hannibal	U. S. Weather Bureau	Oakfield	E. E. Steines.
Arlington	Wm. R. Bennett.	Harrisonville	A. J. Sharp.	Oregon	Tom Curry.
Avalon	F. G. Ashbaugh.	Hermann	Wm. E. Crawford.	Osceola	Wm. E. Mathews.
Bethany	M. H. Moulton.	Hollister	W. P. Chapmann.	Pacific	Mark Waters.
Birchtree	V. H. Kirkendall.	Houston	R. F. Harmon.	Palmyra	W. B. Markell.
Bolivar	K. H. Brown.	Jackson	L. M. Bean.	Patton (near)	George F. Ellis.
Boonville	C. Randecker.	Jefferson City	Miss Emma Swift.	Poplar Bluff	Miss Belle Kinne.
Brunswick	Louis Benecke.	Kansas City	U. S. Weather Bureau.	Rolla	Prof. Elmo G. Harris.
Cape Girardeau	D. L. Albert.	Keytesville	J. T. Dewey, M. D.	St. Catherine	L. D. Baker.
Caruthersville	H. E. Averill.	Kidder	J. F. Sharp.	St. Charles	L. C. Saeger.
Cassville	William Talbert.	Kirksville	Prof. Mark Burrows.	St. Joseph	U. S. Weather Bureau.
Clifton Hill	L. S. Harlan.	Koshkonong	R. M. Hitt.	St. Louis(1)	U. S. Weather Bureau.
Chillicothe	R. L. Isherwood.	Lamar	Joe W. Springer.	St. Louis(2)	St. Louis University.
Clinton	A. E. Derwent, M. D.	Lamonte	J. Ed. Hall.	Shelbina	S. G. Parsons.
Columbia	U. S. Weather Bureau.	Lebanon	Leonard E. Dickerson.	Springfield	U. S. Weather Bureau.
Conception	Fr. Adelhelm Hess.	Lexington	J. W. Keithley.	Steelville	A. L. Kreamelmeyer.
Crocker	Roy W. Reed.	Liberty	W. C. Wilmott.	Steffenville	Frank Hall.
Dean	H. E. Dean	Lockwood	C. S. Crow	Tarkio	John F. Frazier.
Doniphan	W. W. Martin.	Louisiana	J. T. Farrell.	Trenton	W. H. Estes.
Eldon	E. H. Shepherd.	Macon	Charles N. Tolman.	Tuscumbia	C. B. Wright.
Fayette	L. G. Abernathy.	Marble Hill	Prof. W. A. Kinder.	Union	J. Wm. Keller.
Fulton	Dr. C. J. Elmore.	Marshall	Prof. W. H. Black.	Unionville	Geo. W. Davis.
Gallatin	Robert R. Wynne, Jr.	Maryville	J. R. Brink.	Valley Park	T. W. McNeese.
Gano	A. C. Leach.	Mexico	R. M. Llewellyn.	Warrenton	Prof. J. H. Frick.
Glencoe	Vint R. Neel.	Mountain Grove	Missouri Fruit Exp. Station.	Warrensburg	George H. Collins.
Goodland	F. M. Adams.	Neosho	W. O. Buck.	Warsaw	J. R. Smith, M. D.
				Waverly	John W. Cauthorn.

TOTAL PRECIPITATION FOR YEAR 1918.



SCALE OF SHADES---INCHES.

☐	▤	▨	▤	▦
Less than 30	30 to 35	35 to 40	40 to 45	more than 45

TORNADOES IN MISSOURI

From the Beginning of Records to December, 1918, Inclusive.

Year, Month, Day	Hour beginning	Place (County)	Length of path, Miles	Deaths	Injured	Property Loss	Authority
1814, spring		Jackson					Finley.
1826, summer		"				severe	"
1841, Oct. 25	6.30 p.m.	"	12				"
1850		Reynolds					An. Rep. Ch.
1860, June 3	evening	DeKalb					Finley.
1863, " 16	aft'rnoon	Holt					"
1875, Feb. 23	2.20-3.10 p.	Johnson and Pettis	30			severe	"
1876, " 27		St. Charles					"
1877, Mar. 31	5.00 p.m.	Barry					"
June 21		Buchanan					"
" 30	aft'rnoon	St. Louis					"
May 31		Lafayette					"
1878, June 1	1.05 p.m.	Ray					"
July 16	2.00 p.m.	Cass	7			severe	"
1879, May 25	3.00 p.m.	Andrew	16	0	0	timber	"
" 29	3.30 p.m.	Andrew, Nodaway, Gentry	36	0	3	severe	"
" 30	5.30 p.m.	Cass, Jackson, Ray	52	7	18	$35,000	"
" 30	9.00 p.m.	Gentry	22	0	0	5,000	"
Nov. 8	2.15 p.m.	Cass	1	2	5	severe	"
Dec. 9	4.00 p.m.	Randolph			9	"	"
1880, Apr. 18	aft'rnoon	Barry, Greene, Laclede	45	83	210	1 000 000	An. Rep. Ch.
" 18	"	Christian, Webster, Crawford	100	10	21	140,000	"
" 18	"	Morgan, Cole, Callaway	67	13	57	150,000	"
" 24	7.00 p.m.	Lewis	6	0	5	1,000	"
" 24	5.00 p.m.	Jasper	7	0	6	90,000	"
May 9	1.00 p.m.	Lincoln	7	0	0	9,000	Finley.
Dec. 4	7.20 p.m.	Jasper, Lawrence, Greene	33	0	0	5,000	An. Rep. Ch.
" 4	7.35 p.m.	Lawrence, Greene, Webster	61	0	0	7,000	"
" 4	8.00 p.m.	Barry, Stone, to Webster	51	0	0	2,000	"
1881, June 12	4.25 p.m.	Nodaway	14	4	9	30,000	"
" 12	5.00 p.m.	Andrew and Gentry	18	15	22	60,000	"
" 12	5.00 p.m.	Dekalb and Gentry	12	4	6	45,000	"
Sept 26	5.30 p.m.	Holt	25	...	...	severe	"
" 29	aft'rnoon	Boone	2	...	...	2,000	"
" 29	night	Nodaway					Finley
1882, Apr. 9	4-6 p.m.	Pettis, C'p'r, H'w'rd, R'nd'lph	65	11	150	90,000	An. Rep. Ch.
" 9	4.10 p.m.	Henry and Pettis	16	0	0	10,000	"
" 9	6.00 p.m.	Reynolds				severe	"
May 9	12.15 pm.	Warren		0	0	15,000	"
" 9	aft'rnoon	Atchison	12	0	0	25,000	"
June 17	aft'rnoon	Cass to Saline	60	0	4	35,000	"
July 11	aft'rnoon	Jackson	4	0	0	0	"
1883, Apr. 14	1.00 p.m.	Marion	5	0	0	5,000	"
" 14	4.00 p.m.	Audrain					"
" 29	8.00 p.m.	Cass	3	0	0	4,000	"
May 9	aft'rnoon	Cole	7	0	0	3,000	"
" 13	3.00 p.m.	Lincoln	3	0	0	1,000	"
" 13	4.30 p.m.	Jackson and Clay	22	4	..	300,000	"
" 13	5.00 p.m.	Daviess	6	0	0	2,000	"
" 13	5.00 p.m.	Clinton	23	0	0	15,000	"
" 13	7.00 p.m.	Andrew	4	0	0	5,000	"
" 13	8.00 p.m.	Macon	15	4	6	25,000	"
" 17	6.10 p.m.	Putnam	1	0	0	1,500	"
" 17		Miller and Maries	30				"
" 18	7.00 p.m.	Montgomery	19	1	1	30,000	"
" 18	7.40 p.m.	Jasper	9	6	33	85,000	"
" 18	evening	Warren, St Charles	30	0	0	45,000	"
" 18	evening	St. Charles	4	0	0	30,000	"
" 18	5.00 p.m.	Madison	6	0	0	4,000	"
1884, Feb. 19		Dallas				severe	Finley.
Mar. 27	7-8 p.m.	Livingston	1	0	0	100	An. Rep. Ch.
Apr. 1	11.00 pm	Livingston		0	0	0	Finley.
" 24	6.00 p.m.	DeKalb	1-4	0	0	600	An. Rep. Ch.
" 26	night	Jasper	2	0	0	1,000	"
" 27		Barton	20	1	2	20,000	Finley.
" 27		Gentry	18	2	1	30,000	"
May 18		Cooper	4	0	1	4,000	"
June 8	6.00 p.m.	Moniteau and Cole	31				"
" 8	7.00 p.m.	Pike	3				"
July 4	5.00 p.m.	Vernon and Bates	16	1	1	31,000	"
" 4	6.00 p.m.	Shelby	5	0	2	12,000	"
" 5	4-4.30 pm.	New Madrid	12	1	3	6,000	"
Sept. 23	5.30 p.m.	Boone	2	0	0	1,500	An. Rep. Ch.
1885, Apr. 1	8.30 p.m.	Lafayette	6	0	0	60,000	Wea. Rev.
" 29	8.30 p.m.	Cass	30	1	5	40,000	" "
June 2	7.00 p.m.	Nodaway	2	0	0	500	" "
" 3	6.45 p.m.	"	40	0	8	22,000	" "
" 3	6.4 p.m.	"	7	0	0	1,000	" "
" 20	10.00 pm.	Jackson	3	0	0	5,000	" "
" 20	11 p.night	Caldwell, Livingston, Macon	75	1	0	40,000	" "
" 21	12.15 a.m.	Saline and Howard	15	1	1	4,000	" "
July 10	4.00 p.m.	Greene	2	0	0	0	" "
1886, Apr. 14	aft'rnoon	Scott	10	4	2	5,000	" "
" 14	7.30 p.m.	Nodaway	6	6	10	25,000	" "
May 11	aft'rnoon	Jackson	3	19	30	75,000	" "
Aug. 17	5.00 p.m.	Buchanan	1	0	0	500	Finley.
Apr. 14	7.30 p.m.	Holt and Nodaway	15	5	9	6,000	"
1887, May 4	4.30 p.m.	Taney	6	0	0	7,000	"
" 15	10.30 pm.	Jackson		0	0		Wea. Rev.
June 10	5.30 a.m.	"					" "
1888, July 14	aft'rnoon	Pettis		0	0	0	Clim. Data.
1889, June 20	1.00 p.m.	Nodaway	12	0	7	10,000	Henry
1890, Jan. 12	1.20 p.m.	St. Louis	1	0	0	25,000	Clim. Data.
Mar. 27		Johnson	4	0	0	4,000	Henry
May 9	5.30-6.30 p	Harrison	21	0	0	20,000	"
1891, Feb. 21	1.15 p.m.	Lincoln	6	0	0	25,000	"
Apr. 26	aft'rnoon	Carroll	4	0	0	13,000	Clim. Data.
May 29	3-4 p.m.	Boone and Audrain	39	3	11	75,000	Henry
[illegible]	aft'rnoon	Carroll	2	0	0	3,000	Clim. Data.
[illegible]	aft'rnoon	Dade	6	0	4	15,000	" "
[illegible]	[illegible] p.m.	Mississippi	4	0	0	6,000	Henry
1892, Apr. [illegible]	[illegible] p.m.	Carroll	3	0	0	8,000	"
Apr. [illegible]	[illegible] p.m.	Adair	2	0	0	5,000	"
May [illegible]	aft'rnoon	Webster	1	0	0	5,000	Clim. Data.
[illegible]	[illegible] p.m.	Dent	20	10	20	20,000	Henry
[illegible]	[illegible] p.m.	Lafayette	12	6	10	10,000	"
[illegible]	[illegible]	Franklin		0	0	5,000	"
[illegible]	[illegible]	Barry	4	0	3	7,000	"
[illegible]	[illegible]	Cass	2	0	0	5,000	"
[illegible]	[illegible]	Dent	4	1	1	11,000	Clim. Data.
[illegible]	[illegible]	Texas	12	3	32	15,000	Henry
[illegible]	[illegible]	Washington	20	0	2	9,000	Clim. Data
[illegible]	[illegible]	St. Louis	1	0	0	1,000	Henry
[illegible]	night	Boone	2	0	1	12,000	Clim. Data.
[illegible]		Holt	2	0	0	10,000	" "
[illegible]	[illegible] p.m.	Washington	1	0	0	1,100	" "
[illegible]	[illegible] p.m.	Randolph	[illegible]	0	0	22,000	" "
[illegible]	[illegible] p.m.		6	0	0	3,500	Wea. Rev.
[illegible]	[illegible] p.m.	Boone	3	0	0	200	" "
1896, May 27	6.00 p.m.	Audrain	9	6	[illegible]	[illegible]	Wea. Rev.
" 27	3.35-5.50 p	" and Pike	10	1	9	[illegible]	"
" 27	5.00 p.m.	Montgomery	7	1	4	[illegible]	" "
" 27	5.30 p.m.	Franklin	15	1	7	[illegible]	" "
" 27	6.15 p.m.	Osage	5	2	6	[illegible]	" "
" 27	6-6.15 p.	St. Louis	12	[illegible]	[illegible]	[illegible]	" "
1898, " 31	4.15 p.m.	DeKalb and Daviess	3	0	0	[illegible]	Clim. Data
July 29	4-5 p.m.	Platte	2	0	1	1,000	" "
" 31	aft'rnoon	Nodaway	1	0	0	100	" "
Sept. 6	night	Ray	1	0	0	1,000	" "
1899, Apr. 19	6.30 p.m.	Holt (from Kansas)	6	0	0	[illegible]	" "
" 27	5.10 p.m.	Carroll and Livingston	8	0	0	[illegible]	" "
" 27	5.30 p.m.	Livingston and Linn	12	0	0	2,000	" "
" 27	5.45 p.m.	Sullivan	30	12	19	[illegible]	" "
" 27	6.10 p.m.	Adair	6	34	[illegible]	[illegible]	" "
May 30	10.00 pm.	Holt	10	1	4	2,000	" "
1900, Apr. 16	aft'rnoon	Lafayette	3	0	2	1,000	" "
May 6	5.40 p.m.	Holt	1-4	0	0	200	" "
1902, May 23	6-8 p.m.	Linn and Macon	9	0	5	30,000	" "
" 24	aft'rnoon	Pettis	2	0	0	10,000	" "
1903, May 19	"	Holt		0	0	100	" "
" 25	2.00 a.m.	Webster	1-2	0	0	500	" "
1904, Mar. 26	evening	Pemiscot and New Madrid	7	0	7	23,000	" "
Aug. 26	aft'rnoon	St. Louis	1	0	0	300	" "
1906, Apr. 8	11.00 am.	Howard	2	0	0	2,000	" "
" 8	aft'rnoon	Bollinger	1	0	0	300	" "
1908, May 1	5.00 a.m.	Harrison	2	0	0	6,500	" "
" 12	5.00 p.m.	Atchison	16	0	4	12,000	" "
1909, Apr. 25	aft'rnoon	Barry	7	20	18	22,000	" "
" 25	"	Stone (probably same)	2	2	9	18,000	" "
June 2	8-9 p.m.	Barry	5	1	7	8,000	" "
" 22	night	Lawrence (prob. same storm)	1	0	0	100	" "
1912, " 15	7.00 p.m.	Bates, Cass, Johnson	40	30	67	250,000	" "
1915, May 20	6.25 p.m.	Greene	1	0	0	1,500	" "
July 7	4-5 p.m.	St Charles	21	4	29	20,000	Wea. Rev.
1916, Apr. 19	4.30 p.m.	Vernon, to Cole	125	9	150	1 000 000	Clim. Data
1917, May 21	2.00 p.m.	Douglass, Wright	22	0	2	21,000	" "
" 21	2.30 p.m.	Webster	3	0	0	400	" "
" 21	1.00 p.m.	Douglass	10	0	4	5,000	" "
" 27	11.50 am.	Christian, Webster, Wright	42	1	17	22,000	" "
" 27	11.45 am.	Christian and Webster	58	0	5	3,500	" "
" 27	12.15 pm.	Stone	30	0	19	11,000	" "
" 27	1.00 p.m.	Christian	7	0	1	500	" "
" 27	4.30 p.m.	Ste. Genevieve	15	0	15	2,500	" "
" 27	12.00 m.	Newton	2	1	1	2,000	" "
" 30	1.00 p.m.	Wright, Dent, Wash., Jefferson	122	8	77	372,500	" "
" 30	1.30 p.m.	Texas	35	4	4	11,000	" "
" 30	1.50 p.m.	Texas and Dent	60	2	19	23,500	" "
" 30	4.30 p.m.	St. Francois	25	1	7	25,000	" "
" 30	4.45 p.m.	"	10	1	6	10,000	" "
" 30	4.30 p.m.	Reynolds and Iron	22	5	12	11,000	" "
" 30	5.30 p.m.	Madison	6	3	0	25,000	" "
" 30	6.00 p.m.	Wayne and Bollinger	50	24	159	364,500	" "
" 30	7.00 p.m.	Stoddard and Scott	32	6	25	21,500	" "
" 30	8.15 p.m.	Scott	6	0	0	1,000	" "
" 30	8.00 p.m.	"	19	0	22	30,000	" "
" 30	6.30-8.30 p	" (several storms)	12	0	3	151,000	" "
" 30	night	Dunklin	18	1	1	2,000	" "
" 30	2.00 p.m.	Franklin	8	0	2	2,000	" "
June 1	6.00 p.m.	Dodson, Jackson County	30	1	2	1,000	" "
" 5	8.30 p.m.	Cooper and Boone	43	19	68	310,000	" "
" 5	8.00 p.m.	Ray and Carroll	20	4	4	25,000	" "
" 5	8.45 p.m.	Chariton	15	1	10	25,000	" "
" 5	4.00 p.m.	Jefferson	5	0	0	800	" "
" 12	6.50 p.m.	Mercer	10	2	6	40,000	" "
Oct. 28	7.00 p.m.	Willard, Greene County	18	0	0	20,000	" "
1918, Feb. 27	10.30 pm	Bates	9	0	0	25,000	" "
Apr. 2	6.00 p.m.	Montgomery	11	3	5	8,000	" "
" 2	6.30 p.m.	"	2	1	6	30,000	" "
" 2	6.30 p.m.	Stoddard	4	3	5	20,000	" "
June 20	aft'rnoon	Pulaski		0	0	500	" "
" 24	6.00 p.m.	Adair	5	0	0	7,000	" "
" 24	6.30 p.m.	Sullivan	6	7	10	35,000	" "
Sept. 2	4.30 p.m.	Christian	1-4	0	0	0	" "

KILLING FROSTS, 1918.

Stations.	Last in Spring.	First in Autumn.	Days in Growing Season.	Stations.	Last in Spring.	First in Autumn.	Days in Growing Season.
Northeast Plain.				*Ozark Plateau (continued)*			
Brunswick	April 21	Nov. 1	193	Gano	May 1	Nov. 1	183
Clifton Hill	April 21	Nov. 1	193	Goodland	May 1	Nov. 1	183
Columbia	April 21	Nov. 1	193	Hollister	May 1	Nov. 1	183
Fayette	April 21	Oct. 31	192	Houston	May 1	Nov. 1	183
Fulton	April 13	Nov. 1	201	Koshkonong	April 10	Nov. 1	204
Hannibal	April 10	Nov. 1	204	Lebanon	April 21	Nov. 1	193
Jefferson City	April 11	Nov. 1	203	Lockwood	April 21	Nov. 1	193
Kirksville	May 1	Nov. 1	183	Mountain Grove	May 1	Nov. 1	183
Louisiana	May 1	Nov. 1	183	Neosho	May 1	Nov. 1	183
Macon	April 21	Nov. 1	193	Rolla	May 2	Oct. 31	181
Mexico	April 25	Nov. 1	189	Springfield	April 21	Nov. 1	193
Oakfield	April 21	Nov. 1	193	*Southwest Plain.*			
Palmyra	April 22	Nov. 1	192	Amoret	April 21	Nov. 1	193
St. Catherine	April 21	Nov. 1	193	Appleton City	April 21	Nov. 1	193
St. Charles	April 20	Nov. 1	194	Clinton	April 21	Nov. 1	193
St. Louis (1)	April 10	Nov. 1	204	Harrisonville	April 21	Nov. 1	193
St. Louis (2)	April 10	Nov. 1	204	Lamar	April 21	Nov. 1	193
Steffenville	April 21	Nov. 1	193	Lamonte	April 21	Nov. 1	193
Unionville	April 21	Nov. 1	193	Marshall	April 21	Nov. 1	193
Warrenton	April 21	Nov. 1	193	Nevada		Nov. 1	...
Keokuk, Iowa	April 10	Nov. 1	204	Warrensburg	April 21		...
Southeast Lowlands				Warsaw	May 1	Nov. 1	183
Caruthersville	April 9	Nov. 24	228	*Northwest Plateau.*			
Doniphan	April 13	Nov. 1	201	Avalon	April 11	Nov. 1	203
Jackson	May 1	Nov. 1	183	Bethany	May 1	Sept. 21	142
Marble Hill	April 10	Nov. 1	204	Chillicothe	April 21	Nov. 1	193
Poplar Bluff	April 21	Nov. 1	193	Conception	April 21	Nov. 1	193
Cairo, Ill.	April 9	Nov. 11	215	Gallatin		Nov. 1	..
Ozark Plateau.				Grant City	April 21	Oct. 25	186
Arcadia	May 1	Nov. 1	183	Kansas City	April 21	Nov. 1	193
Birchtree	April 10	Nov. 1	204	Kidder	April 20	Oct. 31	193
Bolivar	April 21	Nov. 1	193	Lexington	April 21	Nov. 1	193
Cassville	May 2	Nov. 1	182	Liberty	April 21	Nov. 1	193
Crocker	April 21		...	Maryville	April 28	Oct. 28	182
Dean	May 1	Nov. 1	183	Oregon	April 28	Oct. 28	182
Eldon	April 21	Nov. 1	193	St. Joseph	April 21	Nov. 1	193
Farmington		Nov. 1	...	Tarkio	April 21	Oct. 28	189
				Trenton	April 21	Nov. 1	193

[illegible] compiled from all available sources, including lists compiled by Lieut Finley and Prof. Henry; Annual Reports of Chief, Missouri Weather Review, Missouri State [illegible] Reports and Climatological Data. Estimates of damage are conservative.

O. R. R.

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